Authorization for Credit Card Transactions

Department of Homeland Security

Form G-1450

How To Fill Out Form G-1450

1. Type or print legibly in black ink.
2. Complete the "**Applicant's/Petitioner's/Requester's Information**," "**Credit Card Billing Information**," and "**Credit Card Information**" sections and sign the authorization. **NOTE:** The credit card must be issued by a U.S. bank.
3. Place your Form G-1450 ON TOP of your application, petition, or request package.

NOTE: Failure to provide the requested information may result in DHS and your financial institution not accepting the payment. DHS cannot process credit card payments without an authorized signature.

NOTE: Please see the USCIS Form G-1450 website for additional information.

We recommend that you print or save a copy of your completed Form G-1450 to review in the future and for your records.

By completing this transaction, you agree that you have paid for a government service and that the filing fee, biometric services fee and all related financial transactions are final and not refundable, regardless of any action DHS takes on an application, petition, or request. You must submit all fees in the exact amounts. DHS will charge your credit card up to the amount you authorize below.

Please refer to the form(s) you are filing for additional information, or you may call the USCIS Customer Contact number at **1-800-375-5283**. For TTY (deaf or hard of hearing) call: **1-800-767-1833**.

Applicant's/Petitioner's/Requester's Information (Full Legal Name)		
Given Name (First Name) **Amim Moises**	Middle Name (if any) **N/A**	Family Name (Last Name) **SALUM KNABBEN**
Credit Card Billing Information (Credit Card Holder's Name as it Appears on the Card)		
Given Name (First Name)	Middle Name (if any)	Family Name (Last Name)
Credit Card Holder's Billing Address:		
Street Number and Name	Apt. Ste. Flr. ☐ ☐ ☐	Number
City or Town	State	ZIP Code
Credit Card Holder's Signature and Contact Information:		
Credit Card Holder's Signature		
Credit Card Holder's Daytime Telephone Number	Credit Card Holder's Email Address	
Credit Card Information		
Credit Card Number	**Credit Card Type:** ☐ Visa ☐ MasterCard ☐ American Express ☐ Discover	Authorized Payment Amount $ 715.00
Credit Card Expiration Date (mm/yyyy) CVV Code		

Authorization for Credit Card Transactions

Department of Homeland Security

Form G-1450

How To Fill Out Form G-1450

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2. Complete the "**Applicant's/Petitioner's/Requester's Information**," "**Credit Card Billing Information**," and "**Credit Card Information**" sections and sign the authorization. **NOTE:** The credit card must be issued by a U.S. bank.
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Applicant's/Petitioner's/Requester's Information (Full Legal Name)		
Given Name (First Name) Amim Moises	Middle Name (if any) N/A	Family Name (Last Name) SALUM KNABBEN
Credit Card Billing Information (Credit Card Holder's Name as it Appears on the Card)		
Given Name (First Name)	Middle Name (if any)	Family Name (Last Name)
Credit Card Holder's Billing Address:		
Street Number and Name	Apt. Ste. Flr. ☐ ☐ ☐	Number
City or Town	State	ZIP Code
Credit Card Holder's Signature and Contact Information:		
Credit Card Holder's Signature		
Credit Card Holder's Daytime Telephone Number	Credit Card Holder's Email Address	
Credit Card Information		
Credit Card Number Credit Card Expiration Date (mm/yyyy) CVV Code	**Credit Card Type:** ☐ Visa ☐ MasterCard ☐ American Express ☐ Discover	Authorized Payment Amount $ 300.00

YOUSA
Law Firm

EB-1A EXTRAORDINARY ABILITY
IMMIGRANT PETITION

Petitioner: KNABBEN, Amim Moises Salum

Field: STEM (Techonology)

HS Law Corp
P.O Box 90487
San Diego - CA - United States

e-Notification of Application/Petition Acceptance

Department of Homeland Security
U.S. Citizenship and Immigration Services

USCIS
Form G-1145

What Is the Purpose of This Form?

Use this form to request an electronic notification (e-Notification) when U.S. Citizenship and Immigration Services accepts your immigration application. This service is available for applications filed at a USCIS Lockbox facility.

General Information

Complete the information below and clip this form to the first page of your application package. You will receive one e-mail and/or text message for each form you are filing.

We will send the e-Notification within 24 hours after we accept your application. Domestic customers will receive an e-mail and/or text message; overseas customers will only receive an e-mail. Undeliverable e-Notifications cannot be resent.

The e-mail or text message will display your receipt number and tell you how to get updated case status information. It will not include any personal information. The e-Notification does not grant any type of status or benefit; rather it is provided as a convenience to customers.

USCIS will also mail you a receipt notice (I-797C), which you will receive within 10 days after your application has been accepted; use this notice as proof of your pending application or petition.

USCIS Privacy Act Statement

AUTHORITIES: The information requested on this form is collected pursuant to section 103(a) of the Immigration and Nationality Act, as amended INA section 101, et seq.

PURPOSE: The primary purpose for providing the information on this form is to request an electronic notification when USCIS accepts immigration form. The information you provide will be used to send you a text and/or email message.

DISCLOSURE: The information you provide is voluntary. However, failure to provide the requested information may prevent USCIS from providing you a text and/or email message receipting your immigration form.

ROUTINE USES: The information provided on this form will be used by and disclosed to DHS personnel and contractors in accordance with approved routine uses, as described in the associated published system of records notices [**DHS/USCIS-007 - Benefits Information System and DHS/USCIS-001 - Alien File (A-File) and Central Index System (CIS)**, which can be found at **www.dhs.gov/privacy**]. The information may also be made available, as appropriate for law enforcement purposes or in the interest of national security.

Complete this form and clip it on top of the first page of your immigration form(s).

Applicant/Petitioner Full Last Name	Applicant/Petitioner Full First Name	Applicant/Petitioner Full Middle Name
SALUM KNABBEN	**Amim Moises**	**N/A**

Email Address	Mobile Phone Number (Text Message)
amim.knabben@gmail.com	

Notice of Entry of Appearance as Attorney or Accredited Representative

Department of Homeland Security

DHS Form G-28
OMB No. 1615-0105
Expires 05/31/2021

Part 1. Information About Attorney or Accredited Representative

1. USCIS Online Account Number (if any)

▶ 0 0 7 4 9 2 6 2 5 4 3 8

Name of Attorney or Accredited Representative

2.a. Family Name (Last Name): HAVERROTH SILVA

2.b. Given Name (First Name): Otavio

2.c. Middle Name: N/A

Address of Attorney or Accredited Representative

3.a. Street Number and Name: PO Box 90487

3.b. ☐ Apt. ☐ Ste. ☐ Flr. N/A

3.c. City or Town: San Diego

3.d. State: CA **3.e.** ZIP Code: 92169
(USPS ZIP Code Lookup)

3.f. Province: N/A

3.g. Postal Code: N/A

3.h. Country: USA

Contact Information of Attorney or Accredited Representative

4. Daytime Telephone Number: 5102419336

5. Mobile Telephone Number (if any): 5102419336

6. Email Address (if any): otavio@legalhs.com

7. Fax Number (if any): N/A

Part 2. Eligibility Information for Attorney or Accredited Representative

Select **all applicable** items.

1.a. ☒ I am an attorney eligible to practice law in, and a member in good standing of, the bar of the highest courts of the following states, possessions, territories, commonwealths, or the District of Columbia. If you need extra space to complete this section, use the space provided in **Part 6. Additional Information**.

Licensing Authority: California

1.b. Bar Number (if applicable): 343486

1.c. I (select **only one** box) ☒ am not ☐ am subject to any order suspending, enjoining, restraining, disbarring, or otherwise restricting me in the practice of law. If you are subject to any orders, use the space provided in **Part 6. Additional Information** to provide an explanation.

1.d. Name of Law Firm or Organization (if applicable): HS Law Corp

2.a. ☐ I am an accredited representative of the following qualified nonprofit religious, charitable, social service, or similar organization established in the United States and recognized by the Department of Justice in accordance with 8 CFR part 1292.

2.b. Name of Recognized Organization: N/A

2.c. Date of Accreditation (mm/dd/yyyy): N/A

3. ☐ I am associated with N/A, the attorney or accredited representative of record who previously filed Form G-28 in this case, and my appearance as an attorney or accredited representative for a limited purpose is at his or her request.

4.a. ☐ I am a law student or law graduate working under the direct supervision of the attorney or accredited representative of record on this form in accordance with the requirements in 8 CFR 292.1(a)(2).

4.b. Name of Law Student or Law Graduate: N/A

Part 3. Notice of Appearance as Attorney or Accredited Representative

If you need extra space to complete this section, use the space provided in **Part 6. Additional Information**.

This appearance relates to immigration matters before (select **only one** box):

1.a. ☒ U.S. Citizenship and Immigration Services (USCIS)

1.b. List the form numbers or specific matter in which appearance is entered.

I-140

2.a. ☐ U.S. Immigration and Customs Enforcement (ICE)

2.b. List the specific matter in which appearance is entered.

N/A

3.a. ☐ U.S. Customs and Border Protection (CBP)

3.b. List the specific matter in which appearance is entered.

N/A

4. Receipt Number (if any)

► N/A

5. I enter my appearance as an attorney or accredited representative at the request of the (select **only one** box):

☐ Applicant ☒ Petitioner ☐ Requestor
☐ Beneficiary/Derivative ☐ Respondent (ICE, CBP)

Information About Client (Applicant, Petitioner, Requestor, Beneficiary or Derivative, Respondent, or Authorized Signatory for an Entity)

6.a. Family Name (Last Name) SALUM KNABBEN

6.b. Given Name (First Name) Amim Moises

6.c. Middle Name N/A

7.a. Name of Entity (if applicable)

N/A

7.b. Title of Authorized Signatory for Entity (if applicable)

N/A

8. Client's USCIS Online Account Number (if any)

► N/A

9. Client's Alien Registration Number (A-Number) (if any)

► A- N/A

Client's Contact Information

10. Daytime Telephone Number

+55 (48)99663-8106

11. Mobile Telephone Number (if any)

+55 (48)99663-8106

12. Email Address (if any)

amim.knabben@gmail.com

Mailing Address of Client

NOTE: Provide the client's mailing address. **Do not** provide the business mailing address of the attorney or accredited representative **unless** it serves as the safe mailing address on the application or petition being filed with this Form G-28.

13.a. Street Number and Name PO Box 90487

13.b. ☐ Apt. ☐ Ste. ☐ Flr. N/A

13.c. City or Town San Diego

13.d. State CA **13.e.** ZIP Code 92169

13.f. Province N/A

13.g. Postal Code N/A

13.h. Country

USA

Part 4. Client's Consent to Representation and Signature

Consent to Representation and Release of Information

I have requested the representation of and consented to being represented by the attorney or accredited representative named in **Part 1.** of this form. According to the Privacy Act of 1974 and U.S. Department of Homeland Security (DHS) policy, I also consent to the disclosure to the named attorney or accredited representative of any records pertaining to me that appear in any system of records of USCIS, ICE, or CBP.

Part 4. Client's Consent to Representation and Signature (continued)

Options Regarding Receipt of USCIS Notices and Documents

USCIS will send notices to both a represented party (the client) and his, her, or its attorney or accredited representative either through mail or electronic delivery. USCIS will send all secure identity documents and Travel Documents to the client's U.S. mailing address.

If you want to have notices and/or secure identity documents sent to your attorney or accredited representative of record rather than to you, please select **all applicable** items below. You may change these elections through written notice to USCIS.

1.a. ☒ I request that USCIS send original notices on an application or petition to the business address of my attorney or accredited representative as listed in this form.

1.b. ☒ I request that USCIS send any secure identity document (Permanent Resident Card, Employment Authorization Document, or Travel Document) that I receive to the U.S. business address of my attorney or accredited representative (or to a designated military or diplomatic address in a foreign country (if permitted)).

NOTE: If your notice contains Form I-94, Arrival-Departure Record, USCIS will send the notice to the U.S. business address of your attorney or accredited representative. If you would rather have your Form I-94 sent directly to you, select **Item Number 1.c.**

1.c. ☐ I request that USCIS send my notice containing Form I-94 to me at my U.S. mailing address.

Signature of Client or Authorized Signatory for an Entity

2.a. Signature of Client or Authorized Signatory for an Entity

➡ [signature]

2.b. Date of Signature (mm/dd/yyyy) 03/16/2026

Part 5. Signature of Attorney or Accredited Representative

I have read and understand the regulations and conditions contained in 8 CFR 103.2 and 292 governing appearances and representation before DHS. I declare under penalty of perjury under the laws of the United States that the information I have provided on this form is true and correct.

1. a. Signature of Attorney or Accredited Representative

[signature]

1.b. Date of Signature (mm/dd/yyyy) 03/16/2026

2.a. Signature of Law Student or Law Graduate

N/A

2.b. Date of Signature (mm/dd/yyyy) N/A

Part 6. Additional Information

If you need extra space to provide any additional information within this form, use the space below. If you need more space than what is provided, you may make copies of this page to complete and file with this form or attach a separate sheet of paper. Type or print your name at the top of each sheet; indicate the **Page Number**, **Part Number**, and **Item Number** to which your answer refers; and sign and date each sheet.

1.a Family Name (Last Name): SALUM KNABBEN

1.b. Given Name (First Name): Amim Moises

1.c. Middle Name: N/A

2.a. Page Number: N/A **2.b.** Part Number: N/A **2.c.** Item Number: N/A

2.d. N/A

3.a. Page Number: N/A **3.b.** Part Number: N/A **3.c.** Item Number: N/A

3.d. N/A

4.a. Page Number: N/A **4.b.** Part Number: N/A **4.c.** Item Number: N/A

4.d. N/A

5.a. Page Number: N/A **5.b.** Part Number: N/A **5.c.** Item Number: N/A

5.d. N/A

6.a. Page Number: N/A **6.b.** Part Number: N/A **6.c.** Item Number: N/A

6.d. N/A

Immigrant Petition for Alien Workers

Department of Homeland Security
U.S. Citizenship and Immigration Services

USCIS Form I-140
OMB No. 1615-0015
Expires 02/28/2027

For USCIS Use Only	Fee Stamp	Priority Date	Consulate	Action Block

Classification

- ☐ 203(b)(1)(A) Alien of Extraordinary Ability
- ☐ 203(b)(1)(B) Outstanding Professor or Researcher
- ☐ 203(b)(1)(C) Multinational Executive or Manager
- ☐ 203(b)(2) Member of Professions with Advanced Degree/Exceptional Ability
- ☐ 203(b)(3)(A)(i) Skilled Worker
- ☐ 203(b)(3)(A)(ii) Professional
- ☐ 203(b)(3)(A)(iii) Other Worker

Certification

- ☐ National Interest Waiver (NIW)
- ☐ Schedule A, Group I
- ☐ Schedule A, Group II

Remarks

To be completed by an Attorney or Accredited Representative (if any).	☒ Select this box if Form G-28 or Form G-28I is attached.	Attorney State Bar Number (if applicable)	Attorney or Accredited Representative USCIS Online Account Number (if any)
		343486	0 0 7 4 9 2 6 2 5 4 3 8

► **START HERE - Type or print in black ink.**

Part 1. Information About the Person or Organization Filing This Petition

If an individual is filing this petition, answer **Item Numbers 1.a. - 1.c.** If a company or organization is filing this petition, answer **Item Number 2.**

1.a. Family Name (Last Name): SALUM KNABBEN

1.b. Given Name (First Name): Amim Moises

1.c. Middle Name: N/A

2. Company or Organization Name: N/A

Mailing Address

(USCIS ZIP Code Lookup)

3.a. In Care Of Name: Otavio Haverroth Silva

3.b. Street Number and Name: PO Box 90487

3.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

3.d. City or Town: San Diego

3.e. State: CA **3.f.** ZIP Code: 92169

3.g. Province: N/A

3.h. Postal Code: N/A

3.i. Country: USA

Other Information

4. IRS Employer Identification Number (EIN) ► N/A

5. Are you a nonprofit organized as tax exempt or a governmental research organization? ☐ Yes ☒ No

6. Do you currently employ a total of 25 or fewer full-time equivalent employees in the United States, including all affiliates or subsidiaries of this company/organization? ☒ Yes ☐ No

7. U.S. Social Security Number (SSN) (if any) ► N/A

8. USCIS Online Account Number (if any) ► N/A

Part 2. Petition Type

This petition is being filed for (select **only one** box):

1.a. ☒ An alien of extraordinary ability.

1.b. ☐ An outstanding professor or researcher.

1.c. ☐ A multinational executive or manager.

1.d. ☐ A member of the professions holding an advanced degree or an alien of exceptional ability (who is **NOT** seeking a National Interest Waiver (NIW)).

1.e. ☐ A professional (at a minimum, possessing a bachelor's degree or a foreign degree equivalent to a U.S. bachelor's degree).

Part 2. Petition Type (continued)

1.f. ☐ A skilled worker (requiring at least two years of specialized training or experience).

1.g. ☐ Any other worker (requiring less than two years of training or experience).

1.h. ☐ An alien applying for an NIW (who **IS** a member of the professions holding an advanced degree or an alien of exceptional ability).

This petition is being filed (select **only one** box):

2.a. ☐ To amend a previously filed petition.

Previous Petition Receipt Number

► N/A

2.b. ☐ For the Schedule A, Group I or II designation.

Part 3. Information About the Person for Whom You Are Filing

1.a. Family Name (Last Name): SALUM KNABBEN

1.b. Given Name (First Name): Amim Moises

1.c. Middle Name: N/A

Mailing Address

2.a. In Care Of Name: Otavio Haverroth Silva

2.b. Street Number and Name: PO Box 90487

2.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

2.d. City or Town: San Diego

2.e. State: CA **2.f.** ZIP Code: 92169

2.g. Province: N/A

2.h. Postal Code: N/A

2.i. Country: USA

Other Information

3. Date of Birth (mm/dd/yyyy): 05/10/1986

4. City/Town/Village of Birth: Florianopolis

5. State or Province of Birth: Santa Catarina

6. Country of Birth: Brazil

7. Country of Citizenship or Nationality: Brazil

8. Alien Registration Number (A-Number) (if any)

► A- N/A

9. U.S. SSN (if any) ► N/A

Information About His or Her Last Arrival in the United States

If the person for whom you are filing is in the United States, provide the following information.

10. Date of Last Arrival (mm/dd/yyyy): N/A

11.a. Form I-94 Arrival-Departure Record Number

► N/A

11.b. Expiration Date of Authorized Stay Shown on Form I-94 (mm/dd/yyyy): N/A

11.c. Status on Form I-94 (for example, class of admission, or paroled, if paroled): N/A

12. Passport Number: N/A

13. Travel Document Number: N/A

14. Country of Issuance for Passport or Travel Document: N/A

15. Expiration Date for Passport or Travel Document (mm/dd/yyyy): N/A

Part 4. Processing Information

Provide the following information for the person named in **Part 3.** (select **only one** box):

1.a. ☒ Alien will apply for a visa abroad at a U.S. Embassy or U.S. Consulate at:

1.b. City or Town: Rio de Janeiro

1.c. Country: Brazil

2.a. ☐ Alien is in the United States and will apply for adjustment of status to that of lawful permanent resident.

Part 4. Processing Information (continued)

2.b. Alien's current country of residence or, if now in the United States, last country of permanent residence abroad.

Brazil

If you provided a United States address in **Part 3.**, provide the person's foreign address in **Item Numbers 3.a. - 3.f.**:

3.a. Street Number and Name: 216 Pedra Branca Ave

3.b. ☒ Apt. ☐ Ste. ☐ Flr. 902

3.c. City or Town: Palhoca

3.d. Province: Santa Catarina

3.e. Postal Code: 88137270

3.f. Country: Brazil

If the person's native alphabet is other than Roman letters, type or print the person's foreign name and address in the native alphabet in **Item Numbers 4.a. - 4.c.**:

4.a. Family Name (Last Name): N/A

4.b. Given Name (First Name): N/A

4.c. Middle Name: N/A

Mailing Address

5.a. In Care Of Name: N/A

5.b. Street Number and Name: N/A

5.c. ☐ Apt. ☐ Ste. ☐ Flr. N/A

5.d. City or Town: N/A

5.e. Province: N/A

5.f. Postal Code: N/A

5.g. Country: N/A

If you answer "Yes" to **Item Numbers 6.a. - 10.**, provide the case number, office location, date of decision, and disposition of the decision in the space provided in **Part 11. Additional Information**.

6.a. Are you filing any other petitions or applications with this Form I-140? ☐ Yes ☒ No

6.b. If you answered "Yes" **to Item Number 6.a.**, select all applicable boxes:

- ☐ Form I-485
- ☐ Form I-131
- ☐ Form I-765
- ☐ Other (Provide an explanation in **Part 11. Additional Information**.)

7. Is the person for whom you are filing in removal proceedings? ☐ Yes ☒ No

8. Has any immigrant visa petition ever been filed by or on behalf of this person? ☐ Yes ☒ No

9. Are you filing this petition without an original labor certification because the original labor certification was previously submitted in support of another Form I-140? ☐ Yes ☒ No

10. If you are filing this petition without an original labor certification, are you requesting that U.S. Citizenship and Immigration Services (USCIS) request a duplicate labor certification from the Department of Labor (DOL)? ☐ Yes ☒ No

Part 5. Additional Information About the Petitioner

Type of petitioner (select **only one** box):

1.a. ☐ Employer

1.b. ☒ Self

1.c. ☐ Other (For example, Lawful Permanent Resident, U.S. citizen or any other person filing on behalf of the alien)

N/A

If a company or an organization is filing this petition, provide the following information:

2. Type of Business: N/A

3. Date Established (mm/dd/yyyy): N/A

4. Current Number of U.S. Employees: N/A

5. Gross Annual Income $ N/A

6. Net Annual Income $ N/A

7. NAICS Code ► N/A

8. Labor Certification DOL Case Number: N/A

Part 5. Additional Information About the Petitioner (continued)

9. Labor Certification DOL Filing Date (mm/dd/yyyy)

N/A

10. Labor Certification Expiration Date (mm/dd/yyyy)

N/A

If an individual is filing this petition, provide the following information.

11. Occupation

Software Engineer

12. Annual Income $ N/A

Part 6. Basic Information About the Proposed Employment

1. Job Title

Software Developers

2. SOC Code ▶ 15-1252

3. Nontechnical Job Description

See page 8.

4. Is this a full-time position? ☒ Yes ☐ No

5. If the answer to **Item Number 4.** is "No," how many hours per week for the position?

N/A

6. Is this a permanent position? ☒ Yes ☐ No

7. Is this a new position? ☐ Yes ☒ No

8. Wages (Specify hour, week, month, or year):

$ N/A per N/A

Worksite Location

For **Item Numbers 9.a. - 9.e.**, provide the address where the person will work if different from the address provided in **Part 1.**

9.a. Street Number and Name: To be determined

9.b. ☐ Apt. ☐ Ste. ☐ Flr. To be determined

9.c. City or Town: To be determined

9.d. State: TBD **9.e.** ZIP Code: To be determined

Part 7. Information About the Spouse and All Children of the Person for Whom You Are Filing

For **Part 7.**, provide information on the spouse and all children related to the individual for whom you are filing this petition. Also, note if the individual will apply for a visa abroad or adjustment of status as the dependent of the individual for whom the petition is filed. If you need extra space to provide information about additional family members, use the space provided in **Part 11. Additional Information**.

Person 1

1.a. Family Name (Last Name): FERNANDES KNABBEN

1.b. Given Name (First Name): Libiane

1.c. Middle Name: N/A

2. Date of Birth (mm/dd/yyyy): 12/24/1986

3. Country of Birth: Brazil

4. Relationship: Spouse

5. Is he or she applying for adjustment of status? ☐ Yes ☒ No

6. Is he or she applying for a visa abroad? ☒ Yes ☐ No

Person 2

7.a. Family Name (Last Name): SALUM KNABBEN

7.b. Given Name (First Name): Enzo

7.c. Middle Name: N/A

8. Date of Birth (mm/dd/yyyy): 12/23/2014

9. Country of Birth: Brazil

10. Relationship: Son

11. Is he or she applying for adjustment of status? ☐ Yes ☒ No

12. Is he or she applying for a visa abroad? ☒ Yes ☐ No

Part 7. Information About Spouse and All Children of the Person for Whom You Are Filing (continued)

Person 3

13.a. Family Name (Last Name) N/A

13.b. Given Name (First Name) N/A

13.c. Middle Name N/A

14. Date of Birth (mm/dd/yyyy) N/A

15. Country of Birth
N/A

16. Relationship N/A

17. Is he or she applying for adjustment of status? ☐ Yes ☐ No

18. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Person 4

19.a. Family Name (Last Name) N/A

19.b. Given Name (First Name) N/A

19.c. Middle Name N/A

20. Date of Birth (mm/dd/yyyy) N/A

21. Country of Birth
N/A

22. Relationship N/A

23. Is he or she applying for adjustment of status? ☐ Yes ☐ No

24. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Person 5

25.a. Family Name (Last Name) N/A

25.b. Given Name (First Name) N/A

25.c. Middle Name N/A

26. Date of Birth (mm/dd/yyyy) N/A

27. Country of Birth
N/A

28. Relationship N/A

29. Is he or she applying for adjustment of status? ☐ Yes ☐ No

30. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Person 6

31.a. Family Name (Last Name) N/A

31.b. Given Name (First Name) N/A

31.c. Middle Name N/A

32. Date of Birth (mm/dd/yyyy) N/A

33. Country of Birth
N/A

34. Relationship N/A

35. Is he or she applying for adjustment of status? ☐ Yes ☐ No

36. Is he or she applying for a visa abroad? ☐ Yes ☐ No

Part 8. Contact Information, Certification, and Signature of the Petitioner or Authorized Signatory

Petitioner or Authorized Signatory's Contact Information

1.a. Petitioner's or Authorized Signatory's Family Name (Last Name)

SALUM KNABBEN

1.b. Petitioner's or Authorized Signatory's Given Name (First Name)

Amim Moises

2. Petitioner's or Authorized Signatory's Title

N/A

3. Petitioner's or Authorized Signatory's Daytime Telephone Number

+55 (48)99663-8106

4. Petitioner's or Authorized Signatory's Mobile Telephone Number (if any)

+55 (48)99663-8106

5. Petitioner's or Authorized Signatory's Email Address (if any)

amim.knabben@gmail.com

Petitioner's or Authorized Signatory's Certification and Signature

If filing this petition on behalf of an organization, I certify that I am authorized to do so by the organization:

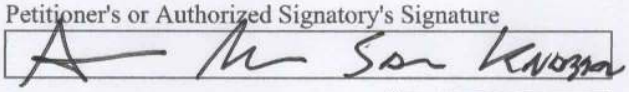
a. I reviewed and provided or authorized all of the responses and information in my petition;

b. I understood all of the responses and information contained in, and submitted with, my petition; and

c. All of the responses and information were complete, true, and correct at the time of filing

Furthermore, I authorize the release of any information from any and all of my records as authorized signatory and the petitioner's records that USCIS may need to determine the petitioner's eligibility for an immigration request and to other entities and persons where necessary for the administration and enforcement of U.S. immigration law.

6.a. Petitioner's or Authorized Signatory's Signature



6.b. Date of Signature (mm/dd/yyyy) 03/16/2026

Part 9. Interpreter's Contact Information, Certification, and Signature

Interpreter's Full Name

1.a. Interpreter's Family Name (Last Name)

N/A

1.b. Interpreter's Given Name (First Name)

N/A

2. Interpreter's Business or Organization Name

N/A

Interpreter's Contact Information

3. Interpreter's Daytime Telephone Number

N/A

4. Interpreter's Mobile Telephone Number (if any)

N/A

5. Interpreter's Email Address (if any)

N/A

Interpreter's Certification and Signature

I certify, under penalty of perjury, that I am fluent in English and N/A, and I have interpreted every question on the petition and Instructions and interpreted the petitioner's or authorized signatory's answers to the questions in that language, and the petitioner or authorized signatory informed me that they understood every instruction, question, and answer on the petition.

6.a. Interpreter's Signature

N/A

6.b. Date of Signature (mm/dd/yyyy) N/A

Part 10. Contact Information, Certification, and Signature of the Person Preparing this Petition, if Other Than the Petitioner or Authorized Signatory

Preparer's Full Name

1. Preparer's Family Name (Last Name)

HAVERROTH SILVA

Preparer's Given Name (First Name)

Otavio

2. Preparer's Business or Organization Name

HS Law Corp

Preparer's Contact Information

3. Preparer's Daytime Telephone Number

5102419336

4. Preparer's Mobile Telephone Number (if any)

5102419336

5. Preparer's Email Address (if any)

otavio@legalhs.com

Preparer's Certification and Signature

I certify, under penalty of perjury, that I prepared this petition for the petitioner or authorized signatory at their request and with express consent and that all of the responses and information contained in and submitted with the petition are complete, true, and correct and reflects only information provided by the petitioner or authorized signatory. The petitioner or authorized signatory reviewed the responses and information and informed me that they understand the responses and information in or submitted with the petition.

6. Preparer's Signature

Date of Signature (mm/dd/yyyy) 03/16/2026

Part 11. Additional Information

If you need extra space to provide any additional information within this petition, use the space below. If you need more space than what is provided, you may make copies of this page to complete and file with this petition or attach a separate sheet of paper. Type or print your name and A-Number (if any) at the top of each sheet; indicate the **Page Number**, **Part Number**, and **Item Number** to which your answer refers; and sign and date each sheet.

1. Family Name (Last Name): SALUM KNABBEN

Given Name (First Name): Amim Moises

Middle Name: N/A

2. IRS EIN ► N/A

3.

Page Number	Part Number	Item Number
4	6	3

Research, design, and develop computer and network software or specialized utility programs. Analyze user needs and develop software solutions, applying principles and techniques of computer science, engineering, and mathematical analysis. Update software or enhance existing software capabilities.

4.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

5.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

6.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

7.

Page Number	Part Number	Item Number
N/A	N/A	N/A

N/A

YOUSA
Law Firm

April 10, 2026

Via USPS

USCIS
Attn: I-140
P.O. Box 660128
Dallas, TX 75266-0128

Re: EB-1 FIRST PREFERENCE: EMPLOYMENT-BASED IMMIGRATION PETITION

Petitioner/Beneficiary:	**KNABBEN, Amim Moises Salum**
Nature of submission:	**ORIGINAL SUBMISSION**
Type of Petition:	**I-140, EB-1 Employment-based, first preference visa based on petitioner's extraordinary ability**
Classification Sought:	**Immigration and Nationality Act 203(b)(1)(A)**

Dear USCIS Officer:

Our firm represents beneficiary and self-petitioner Mr. Amim Moises Salum Knabben (hereinafter Mr. Knabben) in his petition for classification as a person of extraordinary ability under the EB-1A category. Enclosed please find the following forms in support of his petition:

- Form G-1450 in the amount of $715 towards I-140 filing fee.
- Form G-1450 in the amount of $300 towards Asylum Program fee.
- Form, G-1145, e-Notification of Application/Petition Acceptance.
- Form G-28, Notice of Entry of Appearance as Attorney or Accredited Representative.
- Form I-140, Petition for Alien Worker.
- Supporting documentation for Petitioner.

Mr. Knabben qualifies as an alien of extraordinary ability **in STEM – Cloud-Native Infrastructure and Kubernetes**[1] under INA§203(b)(1)(A). The regulation at 8 CFR § 204.5(h) defines "extraordinary ability" as follows:

> (a) Extraordinary ability means a level of expertise indicating that the individual is one of that small percentage who have risen to the very top of the field of endeavor.
>
> (b) Initial evidence. A petition for an alien of extraordinary ability must be accompanied by evidence that the alien has sustained national or international acclaim and that his or her

[1] **Cloud-Native Infrastructure:** an approach to building and running applications using scalable, distributed cloud services designed for flexibility, resilience, and continuous delivery.
Kubernetes: an open-source platform that automates the deployment, scaling, and management of containerized applications across clusters of computers.

achievements have been recognized in the field of expertise. Such evidence shall include evidence of a one-time achievement (that is, a major, internationally recognized award), or **at least three** of the following (8 CFR 204.5(h)(3)):

i. *Documentation of the alien's receipt of lesser nationally or internationally recognized prizes or awards for excellence in the field of endeavor;*
ii. *Documentation of the alien's membership in associations in the field of endeavor, which require outstanding achievements of their members, as, judged by recognized national or international experts in their fields;*
iii. *Published material in professional or major trade publications or major media about the alien and relating to the alien's work in the field of endeavor;*
iv. *Evidence of the alien's participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specification for which classification is sought;*
v. *Evidence of the alien's original scientific, scholarly, or business contributions of major significance in the field of endeavor;*
vi. *Evidence of alien's authorship of scholarly articles in the field, in professional journals or other major media;*
vii. *Evidence of the display of the alien's work at artistic exhibitions or showcase;*
viii. *Evidence that the alien has performed in a leading or critical role for organizations or establishments that have a distinguished reputation;*
ix. *Evidence that the alien has commanded a high salary or other significantly high remuneration for services, in relation to others in the field; or*
x. *Evidence of commercial successes in the performing arts, as shown by box office receipts or record, cassette, compact disk, or video sales.*

(c) If the above standards do not readily apply to the beneficiary's occupation, the petitioner may submit comparable evidence to establish the beneficiary's eligibility.

This letter serves as a guide for all submitted evidence. Please find enclosed the referred documentation.

The petition is to obtain the immigrant classification on behalf of Mr. Knabben as a person of extraordinary ability. Mr. Knabben is a Software Engineer with string expertise in Cloud-Native technology and Kubernetes, the world's leading system for managing massive networks of software. Mr. Knabben has proven track record and achievements demonstrating that he has attained a level of expertise indicating he is one of that small percentage of individuals who have risen to the very top of his field, as can be evidenced by (i) receipt of lesser nationally or internationally recognized prizes or awards for excellence; (ii) Membership in associations in the field for which classification is sought that require outstanding achievement of their members; (iii) Published material about him in professional or major trade publications or other major medias related to his work in the field; (iv) participation as a judge of the work of others in the same or allied field; (v) original scientific, scholarly, or business contributions of major significance to her field; (vi) authorship of scholarly articles in professional or major trade publications; (vii) display of his work at artistic exhibitions or showcases, herein submitted as a comparable evidence; (viii) leading or critical role for organizations or establishments that have a distinguished reputation; and (ix) high salary or substantially high remuneration for services in relation to others in the field.

Mr. Knabben will demonstrate through objective and credible evidence that, by applying the preponderance of evidence standard ("more likely than not"), he indisputably meets **at least nine** of the regulatory criteria**, which is also the maximum applied to his field**, and when considering the petition in its entirety for the final merits determination, he also demonstrates the high level of expertise required for the classification. *(Kazarian v. USCIS*, 596 F.3d 1115 (9th Cir. 2010)).

Moreover, Mr. Knabben seeks to enter the United States to continue work in the area of extraordinary ability, and his entry will substantially benefit the United States in the future, as it will be further demonstrated in this petition.

A. ELIGIBILITY:

I. Mr. Knabben's distinguished career and qualification as an individual of extraordinary ability

Mr. Knabben has built a distinguished career spanning over two decades, marked by a steady progression from foundational infrastructure roles to internationally recognized technical leadership in cloud-native computing. He began his professional journey in the early 2000s working in enterprise infrastructure and network administration, including roles supporting government health systems in Brazil. During this formative period, he developed deep expertise in systems architecture, virtualization, cybersecurity monitoring, and mission-critical network operations. His early career, managing hundreds of devices, securing public infrastructure, and modernizing legacy systems, laid the technical groundwork for his later specialization in large-scale distributed computing. Importantly, all companies that Mr. Knabben contributed with his work are among the Fortune 500 enterprises, meaning that his work in technology development and management was never inside a small or standard integration.

As the global technology landscape shifted toward cloud computing, Mr. Knabben strategically evolved with it. Between 2015 and 2017, he played a pivotal role at Axado, where he developed a high-performance freight API, a critical digital interface that acts as a high-speed bridge, allowing different software systems to communicate and exchange data instantly, capable of handling approximately 10,000 requests per minute. His work directly contributed to the company's growth and eventual $8 million acquisition by *Mercado Livre*, Latin America's largest e-commerce platform. Shortly thereafter, at Loadsmart in New York City, he architected the company's Port Drayage system, transforming an internal logistics platform into a major revenue engine that drove 300% year-over-year growth and secured $19 million in investment from industry leaders PortsAmerica and Maersk. This period marked his transition from strong technical contributor to architect of systems with measurable economic impact on U.S. infrastructure.

Building upon this success, Mr. Knabben established himself as a recognized authority in the Kubernetes and cloud-native ecosystem between 2018 and 2020. He earned all three major Cloud Native Computing Foundation (CNCF) certifications (Certified Kubernetes Administrator - CKA, Certified Kubernetes Application Developer - CKAD, Certified Kubernetes Security Specialist - CKS), became an official member of the Kubernetes organization, and began contributing at a global level. Roughly only about half, or at best two-thirds, of candidates pass each certification, and obtaining all three (CKA, CKAD, and CKS) compounds that difficulty significantly, placing the individual among a relatively small, highly skilled subset of professionals.

Shifting back to his career, At VMware (2021–2023), he pioneered security automation initiatives for Tanzu Kubernetes Grid, achieving substantial compliance with Center for Internet Security (CIS) and Security Technical Implementation Guide (STIG) federal benchmarks while implementing automated Common Vulnerabilities and Exposures (CVE) monitoring across more than 100 internal components. Simultaneously, he contributed to hybrid Windows/Linux orchestration capabilities within Kubernetes, an advancement that expanded enterprise adoption of cloud-native technologies. His expertise earned him the prestigious Kubernetes Contributor Award and later elevation to CNCF Ambassador and Special Interest Group (SIG) Windows Tech Lead, roles reserved for individuals demonstrating sustained, high-impact contributions to the global community**.**

Currently, as Principal Software Engineer and Group Tech Lead at Broadcom, Mr. Knabben operates at the pinnacle of his field. He directs the technical strategy for Tanzu Kubernetes Grid, a multimillion-dollar product line, overseeing more than 30 engineers across five specialized teams. In this capacity, he collaborates directly with executive leadership to align product roadmaps with evolving demands in artificial intelligence infrastructure, zero-trust security architecture, and federal compliance standards. Notably, during the VMware–Broadcom transition, he led the delivery of two critical releases with only 15% of the original team capacity, earning the Broadcom Top Performer Award in 2024.

In brief, Mr. Knabben's career reflects a steady professional growth and sustained ascension to leadership at the forefront of a critical STEM field for over 20 years. From managing foundational infrastructure systems to shaping global cloud-native standards and securing AI-ready platforms used by Fortune 500 enterprises, he has consistently advanced in scope, impact, and recognition. Through ongoing technical leadership, international judging roles at KubeCon, and active collaboration with major technology companies and standards bodies, he continues to position and maintain himself among the foremost experts in secure cloud-native and AI infrastructure worldwide.

II. Mr. Knabben will continue working and contributing to the area of Extraordinary Ability in the United States

Under INA 203(b)(1)(A)(ii), to qualify as a person with extraordinary ability, the petitioner must demonstrate that the beneficiary intends to continue to work in the area of his or her expertise upon immigrating to the United States. The statute does not require a specific job offer; rather, the petitioner must demonstrate a clear and credible intent to pursue professional activities within the same field in which extraordinary ability has been established.

Building upon his established leadership in cloud-native infrastructure, Mr. Knabben will continue advancing the secure deployment of artificial intelligence and distributed systems in the United States. In the immediate term, he intends to focus on strengthening the security, scalability, and reliability of Kubernetes-based platforms that power high-demand AI workloads. He will help in incorporate "security-by-design" principles and automating compliance with federal cybersecurity standards such as DISA[2], STIG,[3] and CIS[4] Benchmarks, **which are considered the "gold**

[2] *Defense Information Systems Agency* (a U.S. Department of Defense agency)
[3] *Security Technical Implementation Guides* (DISA's mandatory cybersecurity configuration standards)
[4] *Center for Internet Security* (a leading cybersecurity standards organization)

standard" security rulebooks used by the U.S. Department of Defense and global industry leaders to ensure that computer systems are "hardened" against cyberattacks and meet the highest possible government safety requirements. Therefore, he will enable government agencies and private enterprises to deploy AI systems that meet stringent national security requirements. This work directly aligns with current U.S. priorities to safeguard critical infrastructure and ensure that emerging AI technologies are deployed responsibly and securely.

Moreover, Mr. Knabben plans to lead the architectural development of next-generation computational clusters capable of supporting multi-tenant, Graphics Processing Unit (GPU) - intensive AI environments across hybrid Windows and Linux systems. Through his ongoing role at a major U.S. technology company and his continued participation in the Cloud Native Computing Foundation, he will remain actively involved in shaping global technical standards that affect millions of developers and thousands of enterprises. By collaborating with standards bodies such as NIST[5] and industry working groups, he will help define best practices for secure AI infrastructure, ensuring that American priorities, security, transparency, and interoperability remain embedded in international frameworks.

In the long term, Mr. Knabben is committed to amplifying his impact through education and workforce development within the United States. He intends to establish advanced training initiatives to equip American engineers with critical skills in AI security, cloud-native architecture, and compliance automation, areas identified as national workforce gaps. Through sustained open-source leadership, mentorship, and standards development, he will not only continue contributing at the highest technical level but will also cultivate the next generation of American infrastructure leaders. Collectively, these efforts demonstrate his clear plan to maintain and expand his extraordinary ability within the United States, delivering lasting and measurable benefit to the nation's technological leadership and security.

Accordingly, Mr. Knabben clearly satisfies the requirement under INA § 203(b)(1)(A)(ii). His detailed and credible plan to contribute, expand, teach, research, and implement his work in the United States constitutes a direct continuation of his area of extraordinary ability in Cloud-Native infrastructure and Kubernetes.

III. Mr. Knabben' entry to Substantially Benefit the United States in the future

INA 203(b)(1)(A)(iii) establishes that to qualify as a person with extraordinary ability, his/her entry must also substantially benefit the United States in the future. **This interpretation should be broad as neither the statute nor the regulations specifically define the statutory phrase "substantially benefit"**. (*see* U.S. Citizenship & Immigr. Servs., Policy Manual, vol. 6, pt. F, ch. 2, § A.3, https://www.uscis.gov/policy-manual/volume-6-part-f-chapter-2 (last updated Oct. 20, 2021).). The inquiry focuses on whether the individual's continued work in the field will provide meaningful, forward-looking contributions to the nation's interests, including scientific, educational, medical, or public health advancement.

Mr. Knabben's entry and continued presence in the United States will substantially benefit the country because his extraordinary ability sits squarely within **STEM "critical and emerging**

[5] National Institute of Standards and Technology

technologies", specifically, secure cloud computing infrastructure that underpins AI, cybersecurity, and large-scale enterprise and government systems. Consistent with this framework, his plan outlines a concrete U.S.-focused work to accelerate research and development in **security, reliability, and scalability** for cloud-native systems supporting AI utilization and zero-trust compliance, which directly advances U.S. technological leadership and resilience.

In addition, Mr. Knabben's future work is not abstract; it is a continuation of the same highly specialized expertise that has already produced measurable outcomes in the United States. He intends to build next-generation computational clusters with compliance automation so that agencies and enterprises can deploy AI infrastructure that meets demanding federal and industry security standards. This type of work has direct measurable benefits to the U.S. because it reduces systemic cyber risk in the foundational layers of American digital infrastructure, the same layers relied upon by major enterprises and public sector entities.

Moreover, his ongoing leadership in a distinguished U.S. organization (Broadcom) and in the global Kubernetes ecosystem positions him to keep delivering high-impact results at scale, which is precisely the kind of fact pattern USCIS contemplates when weighing extraordinary ability evidence such as "leading or critical role" and "original contributions of major significance." *See* USCIS Policy Manual, Vol. 6, Pt. F, Ch. 2(B).

Finally, Mr. Knabben's sustained presence will yield compounding public benefits because he plans to remain deeply engaged in the U.S. technical ecosystem through open-source leadership and workforce development. As he states, he intends to continue active contributions to cloud-native and open-source projects and to establish training initiatives that equip American engineers and operators with critical skills in AI security and cloud-native architecture. This matters under USCIS's prospective-benefit framework because it demonstrates that his influence will extend beyond a single employer or product cycle: he will help strengthen U.S. capacity by disseminating best practices, mentoring practitioners, and shaping secure infrastructure standards that support long-term innovation.[6]

Accordingly, under the broad interpretation contemplated by INA § 203(b)(1)(A)(iii) and USCIS policy guidance, Mr. Knabben' entry will prospectively and substantially benefit the United States. His continued work in secure, AI-ready cloud infrastructure, combined with community leadership and training, supports a strong conclusion that his ongoing contributions will be valuable to the United States through enhanced cybersecurity, more secure AI deployment, and sustained U.S. leadership in globally adopted technologies. By a preponderance of the evidence, the statutory requirement of substantial prospective benefit is fully satisfied.

The evidence on how Mr. Knabben proposes to continue working and substantially contribute to the area of STEM in the United States, please refer to **Exhibit A**:

A.1. Mr. Knabben's Personal Statement.
A.2. Mr. Knabben's Resume.
A.3. Mr. Knabben's academic diplomas and transcripts

[6] https://www.uscis.gov/newsroom/alerts/uscis-issues-new-guidance-on-eb-1-eligibility-criteria-for-individuals-with-extraordinary-ability

A.4. Certifications and professional training in beneficiary's field demonstrating continued expertise and specialized knowledge.

B. EVIDENCE OF EXTRAORDINARY ABILITY

In the first step of the analysis, the adjudicatory framework requires a threshold evidentiary assessment to determine whether the petitioner has submitted documentation satisfying the regulatory criteria for classification as an individual of extraordinary ability. See 8 C.F.R. § 204.5(h)(3). At this first step, the inquiry is confined to evaluating whether the record demonstrates either (1) a singular, major internationally recognized award, or (2) evidence meeting **at least three** of the ten enumerated regulatory criteria, or evidence comparable to at least three of those criteria where applicable. Id.; U.S. Citizenship & Immigr. Servs., Policy Manual, vol. 6, pt. F, ch. 2, § B (updated Oct. 20, 2021).

When conducting this preliminary analysis, USCIS applies the **preponderance of the evidence standard (>=50%)**, requiring the petitioner to establish that it is more likely than not that the submitted documentation satisfies the applicable regulatory provisions. See USCIS Policy Manual, supra, vol. 6, pt. F, ch. 2, § B.

Criterion 1. Receipt of lesser nationally or internationally recognized prizes or awards for excellence

In order to qualify the petitioner for this eligibility criterion under 8 CFR 204.5(h)(3)(i), USCIS evaluates whether: 1) the person was the recipient of prizes or awards; 2) the award is a lesser nationally or internationally recognized prize or award which the person received for excellence in the field of endeavor. As indicated in the regulation, this criterion does not require an award or prize to have the same level of recognition and prestige associated with the Nobel Prize or another award that would qualify as a one-time achievement.

Moreover, USCIS guidance expressly recognizes that qualifying awards may include **team-based** honors, provided the beneficiary is an identified recipient; specifically, "USCIS determines if the person was the recipient of prizes or awards," and "[n]othing precludes the person from relying on a team award, provided the person is one of the recipients of the award." USCIS Policy Manual, vol. 6, pt. F, ch. 2(A)(5).

SIG Windows Contributor Award 2021 – Kubernetes

The SIG Windows Contributor Award from Kubernetes recognizes outstanding individual contributions to the Special Interest Group (SIG) Windows, a technical working group within the Cloud Native Computing Foundation (CNCF), the leading global consortium dedicated to advancing cloud-native technologies. The 2021 award was presented at *KubeCon*, organized by the CNCF under the Linux Foundation and **regarded the premier international conference for Kubernetes and cloud-native systems**, convening thousands of top engineers, maintainers, and industry leaders from around the world.

Within this highly selective environment, the SIG Windows Contributor Award is conferred upon contributors who have made meaningful, technically significant contributions to the development

and advancement of Windows support in Kubernetes, an area critical to enterprise adoption of cloud-native infrastructure. **Receipt of this award recognizes impact within a globally distributed, peer-reviewed open-source community, where contributions are publicly scrutinized, technically validated, and relied upon by organizations worldwide**. As such, this honor evidences that its recipients are among the relatively small group of contributors whose work has materially influenced a core component of modern cloud infrastructure.

Mr. Knabben is the recipient of the SIG Windows Contributor Award 2021

The most authoritative and objective evidence confirming Mr. Knabben's receipt of the 2021 SIG Windows Contributor Award is the **official Kubernetes Contributors website**, maintained by the CNCF. The publicly accessible 2021 Awards page expressly lists Mr. Knabben under the Windows Special Interest Group (SIG Windows) section as follows:

> "Amim Knabben, @ak_ndb – Improving the developer experience for Windows related changes in Kubernetes which eases the on-ramp of developers to be involved with SIG Windows."

This entry appears on the official awards registry for 2021 Contributor Award Recipients and clearly identifies Mr. Knabben's full name, his recognized contributor alias **(**@ak_ndb**)**, and the specific basis for the award. Because this information is published directly on Kubernetes' official website (kubernetes.dev), it constitutes highly credible, third-party confirmation that Mr. Knabben was formally selected and recognized as a 2021 award recipient. The specificity of the nomination reason further confirms that the award was merit-based and directly tied to his technical contributions.

In addition to the official Kubernetes registry, the December 4, 2025, letter from Dr. Jay Vyas, Staff Software Engineer at Tesla and former SIG Windows Emeritus Tech Lead, independently confirms that Mr. Knabben was the recipient of the 2021 SIG Windows Kubernetes Contributor Award. Dr. Vyas explicitly states:

> "Mr. Knabben received the SIG Windows Kubernetes Contributor Award in 2021. This award was granted by the Cloud Native Computing Foundation (CNCF) through the Kubernetes SIG Windows project, with the recognition ceremony conducted virtually as part of the official events of the Kubernetes community.".

This statement constitutes direct third-party confirmation from a senior member of the Kubernetes ecosystem who is professionally positioned to have knowledge of the award process and its recipients. The letter clearly identifies the specific award, the granting organization (CNCF through Kubernetes SIG Windows), and the year of receipt (2021). As such, Dr. Vyas's testimony serves as independent corroboration that Mr. Knabben was formally selected and recognized as an award recipient within the Kubernetes community.

Finally, the photographic evidence of the award plaque further corroborates the official website documentation. The image prominently displays Mr. Knabben's name:

> "Amim knabben – for work in improving the developer experience for windows related changes in kubernetes which eases the on-ramp of developers to be involved with SIG windows."

The language on the physical award precisely mirrors the official citation published on the Kubernetes website, providing consistent and mutually reinforcing evidence. The alignment between the website listing and the engraved award text eliminates any doubts regarding identity and confirms that the recognition was formally granted to Mr. Knabben in 2021.

The SIG Windows Contributor Award from Kubernetes is a lesser nationally or internationally recognized prize or award which the person received for excellence in the field of endeavor:

The SIG Contributor Award presented at *KubeCon* constitutes a lesser internationally recognized prize within the meaning of 8 C.F.R. § 204.5(h)(3)(i), as it is conferred by the CNCF, a globally recognized authority in cloud-native technologies, and is awarded through a selective, peer-reviewed process limited to a small number of recipients per Special Interest Group.

First, official Kubernetes guidance confirms that recipients are chosen based on demonstrated technical contributions, cross-project impact, and community recognition, with awards granted only to individuals who have "gone above and beyond" in advancing the field. This combination of international scope, competitive selection criteria, and recognition of excellence establishes that the award reflects meaningful distinction within the global technology community.

The Kubernetes/CNCF Contributor Awards are merit-based, highly selective peer recognitions within a global open-source community, demonstrating that the award is international in scope, where each SIG typically nominates only a limited number of recipients based on demonstrated technical contributions, sustained impact across the Kubernetes ecosystem, cross-group collaboration, and adherence to community values, with selections informed by peer nomination and input rather than participation, application, or fees. These awards honor individuals in advancing the field and, given their international scope through the Cloud Native Computing Foundation and *KubeCon*, their limited number of recipients, and their rigorous, peer-reviewed selection criteria, they qualify as internationally recognized awards reflecting meaningful excellence.

Second, the expert testimony from Dr. Jay Vyas also highlights the standing of the award received by Mr. Knabben within the technology community. Dr. Vyas provides an insider's perspective on the award's selectivity, stating:

> *"The Kubernetes Contributor Awards are described as highly selective, recognizing each year only a small number of exceptional contributors from among thousands of active developers... In 2021, only a limited number of awards were granted... from a community of more than 3,000 active contributors."*

Dr. Vyas's letter serves as expert corroboration that this is not a participation certificate, but one of the "highest honors in the global cloud-native development community." His testimony confirms that Mr. Knabben was selected based on "technical merit, innovation, and significant impact,"

specifically for reducing entry barriers for developers, a contribution of major significance to the ecosystem.

Furthermore, Mr. Knabben's receipt of the 2021 SIG Windows Contributor Award satisfies the requirements of 8 C.F.R. § 204.5(h)(3)(i), as interpreted by the USCIS Policy Manual, because the evidence demonstrates that the award constitutes a lesser internationally recognized prize for excellence in the field of technology. As established in the record, the award is conferred by CNCF through the Kubernetes project, a globally recognized authority in cloud-native infrastructure, and presented in connection with *KubeCon*, a premier international conference attended by leading experts in the field. In addition, the award is open to contributors all over the world, and only a very small number of fields are selected as winners.

The selection process is highly selective and peer-driven, with each SIG typically nominating only a limited number of recipients from a large pool of active contributors based on demonstrated technical contributions, cross-project impact, and community recognition. The official Kubernetes registry confirms that Mr. Knabben was specifically recognized for improving the developer experience for Windows-related changes in Kubernetes, a contribution that materially advanced accessibility and participation within the ecosystem. Independent expert testimony from Dr. Jay Vyas further corroborates that the award is granted to only a small number of exceptional contributors and is widely regarded as one of the highest honors within the global cloud-native community, thereby confirming both the competitive nature of the selection process and the significance of the recognition. Collectively, this evidence satisfies the relevant USCIS considerations, including the criteria for selection, the limited number of recipients, the level of competition, and the international scope of the awarding body.

Accordingly, the totality of the evidence establishes that Mr. Knabben's 2021 SIG Windows Contributor Award constitutes a lesser internationally recognized prize awarded for excellence in the field of technology, thereby meeting the requirements set forth under 8 C.F.R. § 204.5(h)(3)(i) and relevant USCIS policy guidance.

Evidence of the foregoing is submitted as follows under **Exhibit B**.

B.1. Official publication from the Kubernetes Contributors website listing the 2021 Contributor Award recipients, confirming that Mr. Amim Knabben was a recipient of the award, including the nomination rationale for his contributions to the Kubernetes project.
B.2. Photograph evidence of the official CNCF/Kubernetes Contributor Award plaque issued to Mr. Amim Knabben, expressly identifying him as a recipient of the award and describing the recognized contributions for which the honor was conferred.
B.3. Letter from Jay Vyas, Broadcom SIG Windows Emeritus Tech-Lead, dated Dec. 4, 2025, confirming that Mr. Knabben was the recipient of the 2021 SIG Windows Kubernetes Contributor Award.
B.4. Official CNCF/Kubernetes Contributors Awards Ceremony Playbook describing the structured, merit-based selection process for Contributor Awards, including peer nomination, evaluation of substantive technical contributions, and limited number of recipients per Special Interest Group, demonstrating that such awards constitute internationally recognized honors for excellence within the global Kubernetes community.

B.5. Official publication from the Cloud Native Computing Foundation (CNCF) announcing the 2025 Community Awards, describing the recognition of outstanding contributors across a global ecosystem of hundreds of thousands of participants and organizations, thereby demonstrating that such awards constitute internationally recognized honors for excellence in the cloud native technology field.

Criterion 2. Membership in associations in the field for which classification is sought that require outstanding achievements of their members, as judged by recognized national or international experts in their disciplines or field.

In observance of this eligibility criterion under 8 CFR 204.5(h)(3)(ii), USCIS determines if the association for which the person claims membership requires that members have outstanding achievements in the field as judged by recognized experts in that field. Examples of associations in the field requiring outstanding achievement of their members may include, but are not limited to:

- A membership in certain professional associations; and
- A fellowship with certain organizations or institutions.

The USCIS Policy Manual also clarifies that general membership in a professional association with higher, selective level of membership may qualify where admission is based on demonstrated, significant contributions to the field and is evaluated by recognized experts. For example, fellowship status within an engineering or technology organization may meet the criterion if candidates are selected based on meaningful contributions to the advancement of the discipline and are vetted by a council of experts or existing fellows. Similarly, fellowship in a scientific society, such as one focused on artificial intelligence, may qualify where membership is granted in recognition of sustained, significant achievements and requires selection by a panel of current fellows. See USCIS Policy Manual, Vol. 6, Pt. F, Ch. 2.

Cloud Native Computer Foundation (CNCF) Ambassador

Mr. Knabben has been recognized as a CNCF Ambassador within the Cloud Native Computing Foundation (CNCF), a project of the Linux Foundation, including his prior selection as an Ambassador for Spring 2023 and his current designation as of February 24, 2026. The CNCF Ambassador program is a selective, merit-based designation conferred upon individuals who have demonstrated sustained, high-impact contributions to the Kubernetes and cloud native ecosystem, as well as leadership in advancing the community through technical work, advocacy, and mentorship. CNCF, as a globally recognized authority responsible for stewarding critical open-source infrastructure such as Kubernetes, evaluates candidates through its leadership and community governance structures, which rely on experienced contributors and maintainers to assess nominees' technical achievements, community involvement, and influence within the field.

CNCF Ambassador membership requires that members have outstanding achievements in the field of technology.

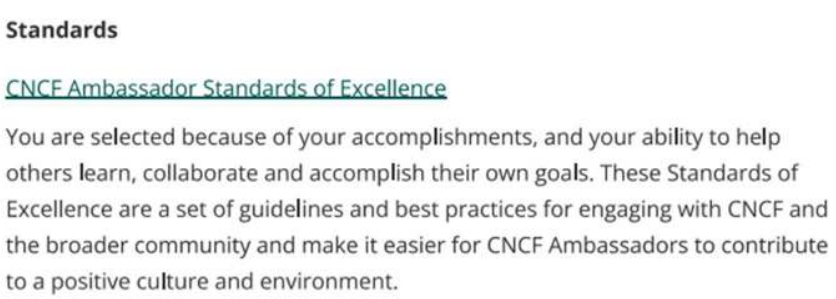
Mr. Knabben's designation as a CNCF Ambassador constitutes membership in a distinguished professional association that requires outstanding achievements, consistent with 8 C.F.R. §

204.5(h)(3)(ii) and USCIS policy guidance. As confirmed by the Linux Foundation-issued credentials, Mr. Knabben was selected as a CNCF Ambassador for Spring 2023 and again for the H1 2024–2026 term, evidencing continued recognition over time.

The CNCF Ambassador program is not open enrollment; rather, it is reserved for individuals who have demonstrated sustained, high-impact contributions to CNCF projects, active leadership within Special Interest Groups (SIGs) or Technical Advisory Groups (TAGs), and meaningful engagement in advancing the global cloud native ecosystem through speaking, mentorship, and technical advocacy. As reflected in the program's earning criteria, candidates must already be established contributors and community leaders prior to selection, underscoring that admission is based on recognized achievements rather than mere participation.

Moreover, advancement and recognition within the Kubernetes and CNCF ecosystem are governed by a structured, peer-reviewed process in which experienced contributors, maintainers, and project leadership evaluate candidates based on their technical contributions, sustained engagement, and impact on the evolution of the technology. This evaluation framework mirrors the USCIS Policy Manual's guidance that qualifying memberships are those in which admission is judged by experts in the field and is predicated upon documented achievements. Here, the CNCF Ambassador designation reflects precisely such a process: individuals are selected because of their accomplishments, technical expertise, and demonstrated ability to advance the field, and are vetted by recognized leaders within one of the most prominent global organizations in cloud native computing.

The information containing on CNCF official website explicitly shows the earning criteria and standard of excellence tied to this recognition (**Exhibit C.2.**):



Standards

CNCF Ambassador Standards of Excellence

You are selected because of your accomplishments, and your ability to help others learn, collaborate and accomplish their own goals. These Standards of Excellence are a set of guidelines and best practices for engaging with CNCF and the broader community and make it easier for CNCF Ambassadors to contribute to a positive culture and environment.

Besides, as confirmed by Aura Montenegro, Community Outreach Manager at CNCF, in her support letter **(Exhibit C.3.)**:

> Notably, internal program data confirm the highly selective nature of the CNCF Ambassador designation, as only approximately 0.003% of applicants from a global cloud-native community exceeding 6.5 million practitioners are admitted in a typical year, underscoring that the program is reserved for individuals who meet rigorous standards of excellence within a vast, internationally recognized professional ecosystem. (highlighted for emphasis).

Accordingly, Mr. Knabben's repeated selection as a CNCF Ambassador satisfies the regulatory requirement that membership be based on outstanding achievements as judged by experts. His designation is not merely honorary or participation-based; rather, it reflects peer-recognized distinction within a highly selective, globally distributed professional community, consistent with USCIS guidance recognizing that elevated, merit-based memberships, akin to fellowship-level distinctions, qualify where they are conferred upon individuals who have made significant contributions to their field.

Membership within the Kubernetes organization

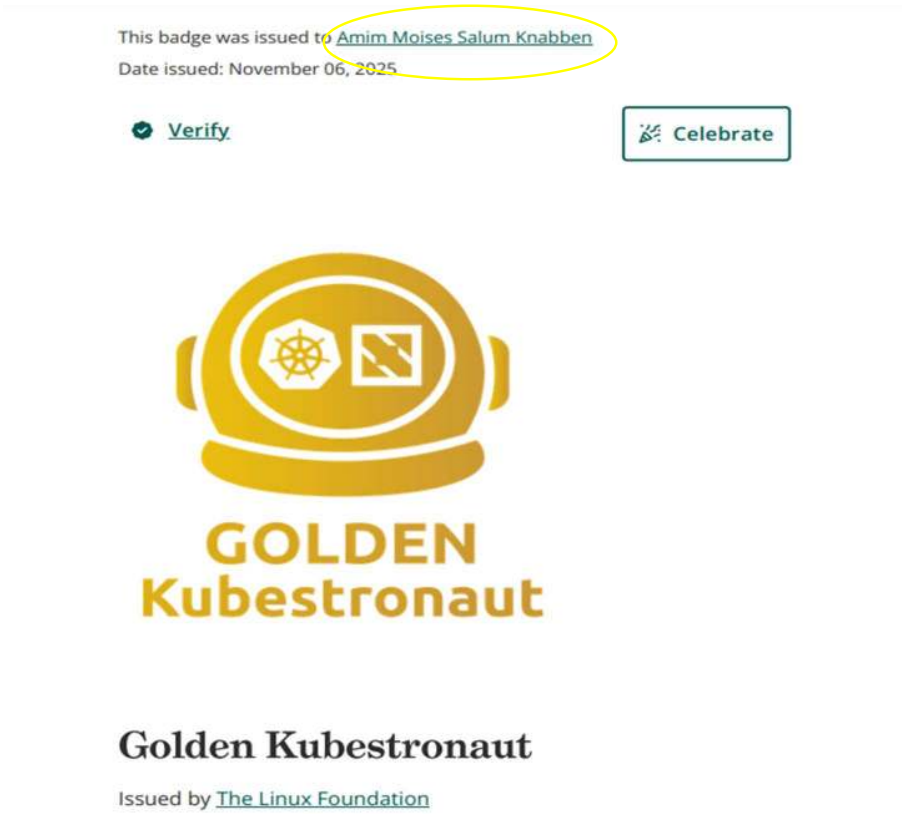
Mr. Knabben is a recognized member of the Kubernetes Organization, a highly selective professional open-source community dedicated to the development and maintenance of Kubernetes, a leading cloud-native infrastructure and container orchestration platform. Membership in this organization is not open to the public but is granted only after a rigorous evaluation process by existing members.

This process requires demonstrated sustained code contributions, technical expertise, active participation in Special Interest Groups, and endorsements by current members. Only about 3 to 5 percent of regular contributors are admitted as members each year, reflecting the high standards and exclusivity of this membership. Mr. Knabben's admission followed a thorough review of his technical contributions, including his work on the SIG Node CI Subproject, the Working Group Component Standard, and his leadership roles in SIG Windows and SIG Network. His membership signifies recognition by experts in the field of his extraordinary technical leadership, sustained participation, and significant impact on the Kubernetes project.

The Kubernetes Organization's membership criteria are based on outstanding achievements as judged by experts within the same technical field. Admission requires sponsorship and positive evaluation by existing members, who assess candidates based on their technical contributions, code reviews, community engagement, and adherence to the community's values. Mr. Knabben's membership was confirmed by the Kubernetes board after a detailed review of his extensive contributions, including over 190 merged pull requests, leadership in refactoring critical test suites, and migration of key components to new standards. This evaluation process ensures that only individuals who have demonstrated exceptional technical skill and leadership are admitted, providing clear proof of Mr. Knabben's extraordinary ability and recognition by his professional peers, thus aligning directly with the regulatory requirements under 8 CFR 204.5(h)(3)(ii),

Golden Kubestronaut – submitted as comparable evidence

On November 06, 2025, Mr. Knabben was recognized as a *Golden Kubestronaut.* A Golden Kubestronaut is a special recognition given to a small group of professionals in the cloud computing field who have proven advanced expertise by passing every difficult, hands-on certification exams covering different areas of a complex technology system called Kubernetes (used worldwide to run modern applications).



In simple terms, it shows that the individual is not just trained in one skill but has demonstrated a high level of knowledge across several specialties, which requires significant experience and is considered uncommon even among technology professionals because proves that he/she has completed *all* certifications across the ecosystem. The *Golden Kubestronaut* title is granted for life, placing the recipient at a highly restrictive niche in cloud computing. For instance, Mr. Knabben was the third person in Brazil, his country of nationality, to receive this recognition. There is only 87 Golden Kubestronaut to date in that cuntry, and only 287 badged holders in the United States.

Golden Kubestronaut badge requires outstanding achievements.

According to the official CNCF website, the Kubestronaut designation is awarded to individuals who successfully pass *all* required Kubernetes-related certifications**,** currently including CKA[7], CKAD[8], CKS[9], KCNA[10], and KCS[11]**,** each of them requiring strict preparation and solid knowledge. With all credentials remaining active at the same time, the professional demonstrates verified, hands-on knowledge across multiple domains of the Kubernetes ecosystem; the more advanced *Golden Kubestronaut* status requires passing all CNCF cloud-native certifications (spanning areas such as security, observability, GitOps, and platform engineering) in addition to the Linux Foundation Certified System Administrator (LFCS), reflecting comprehensive, multi-domain expertise maintained through rigorous, performance-based examinations.

Pursuant to 8 C.F.R. § 204.5(h)(3)(ii), the person must demonstrate membership in associations in the field for which classification is sought that require outstanding achievements of their members, as judged by recognized national or international experts; such memberships must be selective in nature and based on substantive, documented accomplishments rather than mere payment of dues or general participation. In evaluating this criterion, USCIS considers whether the association's admission standards involve a rigorous vetting process, including nomination, peer review, or evaluation by qualified experts, and whether membership is limited to individuals who have attained a high level of distinction in the field.

Where the standard forms of evidence do not readily apply to the person's occupation, comparable evidence may be submitted under 8 C.F.R. § 204.5(h)(4), including proof of similarly selective designations, recognitions, or professional distinctions that, although not formally labeled as "membership," nonetheless require demonstrated excellence, are conferred based on objective and merit-based criteria, and are evaluated by knowledgeable authorities in the field.

Particularly in light of USCIS guidance recognizing that traditional regulatory criteria may not readily apply to professionals in STEM fields. USCIS expressly provides that, where a criterion does not readily apply to a STEM occupation, petitioners may submit evidence of comparable significance to establish sustained acclaim and recognition. See USCIS Policy Manual, Vol. 6, Pt. F, Ch. 2.

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[7] Certified Kubernetes Administrator - demonstrates that the individual can install, configure, and manage Kubernetes systems in real-world environments, including handling clusters, networking, storage, and troubleshooting.

[8] Certified Kubernetes Application Developer - shows the ability to design, build, and deploy applications on Kubernetes**,** meaning the person knows how to create software that runs efficiently within these systems.

[9] Certified Kubernetes Security Specialist- an advanced certification proving expertise in securing Kubernetes environments, including protecting systems from cyber threats, managing access controls, and ensuring safe operation of applications.

[10] Kubernetes and Cloud Native Associate - a foundational certification confirming broad understanding of Kubernetes and cloud-native technologies, including key concepts, architecture, and how modern applications are built and managed.

[11] Kubernetes and Cloud Native Security Associate - focuses on security fundamentals in cloud-native systems, showing knowledge of best practices to protect applications, data, and infrastructure in Kubernetes environments.

In the cloud native technology sector, professional distinction is not typically conferred through formal membership associations with selective admission criteria, such as fellowship-based organizations, but rather through rigorous, certification-based and contribution-based recognition systems administered by leading industry bodies

Mr. Knabben's recognition as a *Golden Kubestronaut* constitutes highly probative comparable evidence pursuant to 8 C.F.R. § 204.5(h)(4), as it reflects exceptional achievement and sustained excellence within the cloud native technology field. This designation is conferred only upon individuals who have successfully obtained a comprehensive suite of advanced, performance-based certifications across multiple domains of Kubernetes and cloud native systems, thereby demonstrating mastery across administration, development, security, observability, and platform engineering. The requirement that all certifications be concurrently active further underscores the sustained nature of the Beneficiary's accomplishments, evidencing ongoing professional excellence. Such a designation inherently reflects a level of technical distinction that exceeds that of ordinary practitioners in the field.

Moreover, the Golden Kubestronaut designation places Mr. Knabben within a very small, globally distributed group of highly specialized professionals, distinguishing him among an international pool of cloud native engineers. The limited number of professionals who hold this recognition, combined with its cumulative and merit-based requirements, demonstrates that it is not a general credential but a selective distinction achieved only by individuals who have attained a high level of expertise across multiple complex domains. This exclusivity aligns with the regulatory intent of recognizing individuals who have risen to the top of their field through demonstrable accomplishments.

Evidence of Golden Kubestronaut designation is appropriately submitted as comparable evidence because the standard regulatory criterion under 8 C.F.R. § 204.5(h)(3)(ii) does not readily translate to the structure of the cloud native technology field. In this industry, professional distinction is not typically conferred through formal "membership" organizations with fellowship tiers, but rather through rigorous, certification-based designations and ecosystem recognition mechanisms governed by leading institutions such as the Cloud Native Computing Foundation (CNCF) and the Linux Foundation. As such, the Golden Kubestronaut designation serves as the functional equivalent of a highly selective, achievement-based membership, as it requires demonstrable excellence, objective evaluation through performance-based examinations, and recognition within a global expert-driven ecosystem. Therefore, it satisfies the evidentiary purpose of the regulation through the lens of 8 C.F.R. § 204.5(h)(4), by providing reliable and probative evidence of the petitioner's recognized expertise and distinction in the field.

Evidence to satisfy this criterion is submitted under **Exhibit C**.

> **C.1.** Printout from the official Cloud Native Computing Foundation (CNCF) website verifying that Mr. Knabben is listed as a current CNCF Ambassador and the criteria for the recognition, confirming his active status within the CNCF Ambassador program and that it requires outstanding achievements of its members as judged by experts.
> **C.2.** Printout of the official CNCF Ambassador credential issued by The Linux Foundation confirming that Mr. Knabben was selected as a CNCF Ambassador for Spring 2023, and that the selection requires outstanding achievements of its members as judged by experts.

C.3. Support letter from Audra Montenegro, Community Outreach Manager, Cloud Native Computing Foundation (CNCF), dated January 21, 2026, confirming Mr. Knabben's membership as a CNCF Ambassador and that the selection was evaluated by experts based on his outstanding achievements.
C.4. Support letter from Ricardo Pchevuzinske Katz, Principal Software Engineer, Kubernetes member and maintainer, SIG Network contributor, confirming Mr. Knabben membership within the Kubernetes Organization and that the requirements for membership are outstanding achievements as judged by experts.
C.5. Verified Golden Kuberstronaut badge of Mr. Knabben, demonstrating that he holds this recognition permanently.
C.6. Printout from the official CNCF website showing Mr. Knabben standing as a Golden Kuberstronaut, demonstrating that he holds this recognition permanently.
C.7. Official publication from CNCF describing the Kubestronaut and Golden Kubestronaut programs, outlining the stringent earning criteria requiring successful completion of all Kubernetes and cloud native certifications and maintenance of active credentials, thereby demonstrating advanced, multi-domain expertise and outstanding achievements in the field.

All in all, the record demonstrates that Mr. Knabben is a member of associations (groups) in the technology field that require outstanding achievements of its members as judges by experts pursuant to 8 CFR 204.5(h)(3)(ii) and his life-time designation as Golden Kuberstronaut is comparable with the regulatory criteria because standards associations do not always readily apply to his field and can be submitted to fully satisfy the rule under 8 C.F.R. § 204.5(h)(4).

Criterion 3. Published material about in professional or major trade publications or other major media, relating to the beneficiary's work in the field for which the classification is sought.

USCIS interprets the plain language of this criterion under 8 CFR 204.5(h)(3)(iii) requiring evidence that (1) the published material is related to the person and the person's specific work; (2) whether the publication qualifies as a professional publication, major trade publication, or major media publication. The USCIS Policy Manual further explains that qualifying evidence under this criterion may include documentation such as articles appearing in newspapers, magazines, academic or industry journals, books, textbooks, comparable publications, or transcripts of professional audio or video coverage discussing the individual and the individual's work. See U.S. Citizenship & Immigr. Servs., Policy Manual, vol. 2, pt. M, ch. 4(D)(3).

The officer must then evaluate whether the submitted material was published in a professional publication, a major trade publication, or another major media outlet. Id. In making this determination, adjudicators consider factors such as the intended audience of the publication, particularly for professional or trade publication, as well as the relative circulation, readership, or viewership associated with the publication when assessing whether it qualifies as major media. Id.

Vmware by Broadcom Blog

Professional *online* publication regarding Mr. Knabben and his work

Online material about Mr. Knabben work in the technology field was published on the Vmware blog on May 24, 2023, under the title *Amusement Parks and Shipping Ports: CNCF Ambassadors Tell All*, by author Suzanne Ambiel. The online article explains that CNCF Ambassadors are community leaders who serve as bridges between global cloud-native technologies and local communities by promoting, teaching, and contributing to open-source innovation while sharing knowledge and feedback across the ecosystem.

In this publication, there is a specific heading dedicated to Mr. Knabben and his work as CNCF ambassador. Paragraphs 16-23 directly relate to his work by confirming that, as a CNCF Ambassador, he operates as a recognized community leader who actively promotes cloud native technologies, contributes to open-source projects, and facilitates knowledge exchange between global and local communities, roles that align with his documented involvement in Kubernetes Special Interest Groups, mentorship efforts, and technical advocacy, thereby demonstrating that his contributions are not only technical but also influential in advancing the broader cloud native ecosystem.

For this reason, the Vmware blog publication has satisfied the first USCIS Policy Manual guidance under 8 CFR 204.5(h)(3)(iii) because it is an online professional publication that is expressly regarding to Mr. Knabben and his work in the field of technology.

VMware blog is a Professional publication (online format)

The VMware Open Source Blog is an official publication of VMware, a globally recognized technology company and leader in cloud computing and virtualization, and features articles authored by subject-matter experts and industry professionals, thereby constituting a credible professional publication within the cloud native technology field. The publication is part of a broader technical and community ecosystem, covering topics such as cloud computing, Kubernetes, open source, security, and infrastructure.

The content of the VMware Blog clearly establishes it as a professional publication authored by subject-matter experts, as its articles address highly technical topics such as cloud computing, Kubernetes, open-source development, security, and enterprise infrastructure, and are written by engineers, developers, and industry professionals with direct, hands-on experience in the field. The depth, terminology, and practical focus of the material demonstrate that its intended audience consists of IT professionals, software engineers, cloud architects, DevOps practitioners, and enterprise technology specialists**,** rather than the general public.

Given this specialized and professional nature, it is not necessary to provide independent evidence of circulation or audience size, as USCIS guidance recognizes that publications directed to a professional or technical audience may qualify as professional or major trade publications based on their content, authorship, and intended readership (Id.). Accordingly, the VMware Blog satisfies the second part of the regulatory requirement by constituting a credible professional publication within Mr. Knabben's field, even in the absence of quantified audience metrics.

Kubernetes Blog

Professional *online* publication regarding Mr. Knabben and his work

Similarly, online material about Mr. Knabben's work in the technology field was published on the official Kubernetes Blog under the article titled *"SIG Node CI Subproject Celebrates Two Years of Test Improvements,"* authored by Sergey Kanzhelev (Google) and Elana Hashman (Red Hat), which highlights his contributions to improving Kubernetes' testing infrastructure and reliability, including his recognition as a Kubernetes organization member for his work within the SIG Node CI subproject, demonstrating his active role in advancing core open-source technologies within a globally recognized technical community.

The publication relates to the activities and contributions of the SIG Node CI subproject, within which Mr. Knabben is expressly identified as a contributor and later recognized as a Kubernetes organization member for his work. The relevant portions of the article directly relate to his work by confirming that he actively participated in improving the reliability and performance of Kubernetes testing infrastructure, including efforts to fix critical test failures, support continuous integration processes, and contribute to high-quality software releases. These responsibilities align with his documented involvement in Kubernetes Special Interest Groups and demonstrate that his contributions were not merely participatory, but impactful in maintaining and advancing a core component of a globally adopted open-source system, thereby evidencing his technical influence and recognized role within the cloud native ecosystem.

For this reason, the Kubernete blog publication has satisfied the first USCIS Policy Manual guidance under 8 CFR 204.5(h)(3)(iii) because it is an online professional publication that is expressly regarding to Mr. Knabben and his work in the field of technology.

Kubernetes blog is a Professional publication (online format)

The Kubernetes Blog is the official publication of the Kubernetes project, hosted on its primary website and used to communicate technical developments, feature releases, and community updates to a global audience. Its content is authored and reviewed by contributors, engineers, and project leaders within the Kubernetes ecosystem and is specifically directed to software developers, cloud engineers, DevOps practitioners, and active contributors working with Kubernetes technologies. The blog operates under formal editorial guidelines and review processes that ensure technical accuracy and relevance, and it is widely recognized as a primary source of information within the cloud native and open-source community, thereby constituting a credible professional publication in the field.

The nature of the publication, which addresses complex topics such as distributed systems, container orchestration, continuous integration, and infrastructure reliability, demonstrates that the intended audience consists of software engineers, DevOps professionals, cloud architects, and contributors within the Kubernetes ecosystem, rather than the general public. Accordingly, the Kubernetes Blog constitutes a professional publication directed to a technical audience, and under USCIS guidance, it is not necessary to provide independent evidence of circulation or readership where the publication's professional nature, authorship, and intended audience are clearly established. Therefore, publications appearing on the Kubernetes Blog satisfy the second regulatory requirement of being material published in a professional or major trade publication within the field under 8 CFR 204.5(h)(3)(iii).

To demonstrate that material about Mr. Knabben and his work was published in professional online publications we are submitting the following evidence on **Exhibit D**:

> **D.1.** Online article *Amusement Parks and Shipping Ports: CNCF Ambassadors Tell All*, May 24, 2023, vmware by Broadcom website, authored by Suzanne Ambiel, (https://blogs.vmware.com/opensource/2023/05/24/amusement-parks-and-shipping-ports-cncf-ambassadors-tell-all), demonstrating that the published material is related to Mr. Knabben and his work in Cloud-Native technology.
> **D.2.** Printout from official Vmware blogs website with a listing of the published articles, field and professional-specific content written by experts, demonstrating that the the venue is a professional online publication.
> **D.3.** Online *article SIG Node CI Subproject Celebrates Two Years of Test Improvements*, February 16, 2022, Kubernetes Blog, authored by Sergey Kanzhelev and Elana Hashman (https://kubernetes.io/blog/2022/02/16/sig-node-ci-subproject-celebrates), demonstrating that the published material is related to Mr. Knabben and his work in Cloud-Native technology.
> **D.4.** Printout from official Kubernetes website specifying the intended audience of people who work on Kubernetes, thereby demonstrating that the Kubernetes blog classifies as a professional publication in the field of technology.

Thus, the supporting evidence clearly demonstrate that material about Mr. Knabben and his work was published in professional online publications and that he meets the criterion under 8 CFR 204.5(h)(3)(iii).

Criterion 4. The Petitioner's participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specialization for which classification is sought.

To qualify for this eligibility criterion, the regulation determines whether the person has acted as the judge of the work of others in the same or allied field of specialization. The petitioner must show that the person has not only been invited to judge the work of others, but also that the person actually participated in the judging proceeding (8 CFR 204.5(h)(3)(iv)).

Reviewer - Linux Foundation events KubeCon + CloudNativeCon North America and Istio Day North America

Mr. Knabben satisfies this criterion because he has been invited to serve as a judge and evaluator of the work of others within the cloud native technology field, including at prominent industry events organized by the Linux Foundation, such as Istio Day North America 2024 and KubeCon + CloudNativeCon North America 2023. These events are globally recognized gatherings of leading professionals, contributors, and organizations in cloud computing and open-source infrastructure, where participation in evaluative roles is extended to individuals with established expertise and recognized contributions.

Mr. Knabben has acted as a judged on several events and conferences in Cloud Native Technology within the Linux Foundation.

In 2023, Mr. Knabben served as a reviewer for KubeCon + CloudNativeCon North America, the flagship conference for professionals and contributors in the open source and cloud native ecosystem. In this role, he evaluated 85 submissions within the ML/AI and Data, Processing, and Storage track over a two-week review period concluding on July 23, 2023. His assessments provided critical input to the Event Chairs in shaping a balanced and high-quality program that reflected emerging trends and developments in the field. This role was performed on a voluntary basis and in accordance with established reviewer standards and guidelines.

In addition, Mr. Knabben served as a reviewer for Istio Day North America 2024, a specialized community event dedicated to one of the most widely adopted service mesh technologies in the industry, bringing together project maintainers, technical leaders, engineers, and researchers within the Istio ecosystem. He was selected for this role based on his recognized expertise in the field and completed 48 session reviews during the review period from July 17 to July 30, 2024. His responsibilities included providing detailed scoring and substantive written evaluations that directly informed the Program Chairs' deliberations and final acceptance decisions.

Moreover, Mr. Knabben holds numerous badges that authorize its recipients to review the work of others in technology such as *Organized 2024 ACD*[12] as well *as Program Committee Program*[13] Europe and India. These badges are issued by recognized industry organizations, including the Linux Foundation and its affiliated communities, to individuals who are selected to participate in the evaluation, curation, and organization of technical content for major conferences and events. Such roles are not open to the general public but are instead extended to professionals who have demonstrated sufficient expertise and credibility to assess the work of peers, including reviewing submissions, scoring technical content, and contributing to program selection decisions.

Holding these badges across multiple events and regions demonstrates that Mr. Knabben is repeatedly entrusted with evaluative responsibilities within the global cloud native ecosystem. His selection for these roles reflects ongoing recognition of his technical judgment and professional standing, as he is called upon to assess the quality, relevance, and innovation of contributions submitted by other engineers and experts in the field. Accordingly, these badges provide credible documentary evidence, when accessing the facts, that Mr. Knabben has served as a judge of the work of others**,** satisfying the first policy requirement of this criterion by showing sustained participation in peer-review and evaluation processes at a high professional level.

Mr. Knabben has not only been invited to judge the work of others in his field, but also actually participated in the judging proceeding.

Demonstrating that the person served as a judge of the work of others in his/her field is not sufficient to fulfill the regulatory criteria under 8 CFR 204.5(h)(3)(iv). The petitioner must also demonstrate that he was invited *and* that he actually participated in the judging event. Letters issued by the organizing bodies of professional conferences and events constitute highly credible and persuasive documentary evidence that the Petitioner has satisfied the second requirement of

[12] The earners have lent their expertise alongside fellow program committee members to organize logistics, and/or review and rate submitted speaking proposals, assisting in the selection of high quality content for their local KCD event.
[13] Earners of this badge are subject matter experts, selected by the KubeCon + CloudNativeCon Europe 2024 Co-Chairs, who have lent their time and expertise alongside fellow program committee members to review and rate submitted speaking proposals, assisting in the selection of high quality talks for the KubeCon + CloudNativeCon Europe 2024 conference agenda.

judging the work of others, as they provide direct, first-hand confirmation from authoritative sources responsible for selecting and overseeing evaluators.

In Mr. Knabben's case, letters issued by the Linux Foundation confirm that he was both invited and actively participated in evaluating the work of others at major industry events, including KubeCon + CloudNativeCon North America 2023 and Istio Day North America 2024. These letters specify that he reviewed 85 submissions for the ML/AI and Data, Processing, and Storage track during a two-week review period concluding on July 23, 2023, and completed an additional 48 session reviews during the July 17 to July 30, 2024, review window. His responsibilities included detailed scoring and substantive written evaluations that directly informed the Program Chairs' deliberations and final acceptance decisions. The letters further confirm that his invitation was based on his recognized expertise in the field, thereby establishing that he was selected through a merit-based process and that he meaningfully performed evaluative duties, satisfying the requirement that he has judged the work of others in his field.

Furthermore, information obtained on CNCF official website corroborates that reviewers for KubeCon + CloudNativeCon are selected through an invitation-based process. Specifically, CNCF explains that Program Committee members, who are responsible for reviewing and evaluating submissions, are invited from within the community, including CNCF Ambassadors and project contributors. The official guidance notes that invitations are extended via direct outreach to qualified individuals, and that committee members are then assigned to review tracks based on their expertise. This confirms that participation as a reviewer is not automatic or publicly accessible, but instead reflects recognition within the field and selection by knowledgeable leaders, thereby reinforcing that individuals such as Mr. Knabben are chosen based on their demonstrated qualifications to evaluate the work of others.

Similarly, individuals who receive the Istio Day Program Committee badge are not merely participants but subject-matter experts selected through a structured evaluation process. The official badge criteria confirm that earners are chosen by the CNCF and are required to demonstrate the ability to impartially review submissions, provide meaningful input, and contribute to the selection of high-quality technical content for the conference program. While the criteria do not explicitly state the word "invitation," they make clear that only individuals with recognized expertise are selected to participate in the review process, and that such participation involves substantive evaluative responsibilities. Accordingly, the issuance of this badge serves as strong, objective evidence that Mr. Knabben was entrusted with judging the work of others based on his qualifications, further corroborating that his role was the result of a merit-based selection process consistent with expert-level evaluation within the field.

Collectively, the submitted evidence demonstrates that Mr. Knabben was invited and actually participated as reviewer on multiple technology events, as well as to participate in a master's degree program panel in the sciences field, squarely aligned with the regulation and the USCIS adjudication standards.

To demonstrate the fulfillment of all elements within this criterion, we are submitting the following evidence under **Exhibit E**:

E.1. Statement Letter from Cody Galloway, Content Manager, The Linux Foundation, demonstrating that Mr. Knabben was invited and actually evaluated works in technology as a committee member of events such as KubeCon and CloudNativeCon in 2023 and 2024.
E.2. CNCF website publication *How the Program Committee is chosen,* demonstrating that CNCF maintainer and ambassador are *invited* by email to perform as members of the committee.
E.3. Badges earned by Mr. Knabben, including as a committee member, track chair, program committee, and organizer, demonstrating that he was selected as a co-chair to judge the work of others in technology in several events and conferences.

Hence, the evidence objectively demonstrates that Mr. Knabben was invited and actually participated as a judge of the work of others in technology - Cloud-Native Infrastructure and Kubernetes, pursuant to 8 CFR 204.5(h)(3)(iv) and USCIS guidelines.

Criterion 5. Original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field.

In evaluating this specific regulatory criterion (8 CFR 204.5(h)(3)(v)), USCIS first determines whether the person has made original scientific, scholarly, artistic, athletic, or business-related contributions to the field. Then, the service determines whether the person's original contributions are considered of major significance to the field.

Among the evidentiary criteria supporting this petition, the evidence demonstrating Mr. Knabben's original contributions of major significance to the technology field is particularly compelling. As detailed below, he is the creator and developer of the *Windows Operational Readiness Project*, a Kubernetes community initiative that establishes standardized tests and specifications to verify that Windows-based clusters are fully functional, reliable, and ready for production use. In addition, Mr. Knabben was the developer of the Loadsmart's primary Full Truckload (FTL) Transportation Management System and is the organizer of the largest Kubernetes event in Brazil, KCG Santa Catarina. The record demonstrates that his original contributions sustain its acclaim throughout the years and represent not merely an original idea, but impactful contributions that have influenced the technology system in large scale, which will be explained in the following sections.

Windows Operational Readiness Kubernete Project

Evidence that Mr. Knabben's contribution is original.

The *Windows Operational Readiness (WOR)* project is a Kubernetes SIG Windows initiative that defines a Windows Operational Readiness Specification, a standardized framework for validating whether Windows (and hybrid Windows/Linux) Kubernetes clusters are operationally ready. The specification is accompanied by a structured test suite (organized into core and extended test sets) intended to validate Windows- and hybrid-specific functionality in a systematic, repeatable way. As described in the supporting documentation, the specification is implemented as a dedicated application (a Go-based test runner) that allows users/operators to execute Windows-specific readiness tests and obtain structured results and reports, rather than relying on Linux-centric conformance testing.

The record supports that Mr. Amim Moises Salum Knabben created and developed the *Windows Operational Readiness* Specification and its associated implementation. Direct confirmation from SIG Windows leadership: James Sturtevant, Principal Software Engineering Lead at Microsoft; SIG Windows Emeritus Tech Lead, states that "Under his leadership [Mr. Knabben], SIG Windows developed the Windows Operational Readiness Specification," and describes it as creating "the first standardized framework for certifying Windows nodes in Kubernetes." (*Sturtevant Letter*, Jan. 18, 2026. **Exhibit F.1.).**

Furthermore, independent confirmation of authorship/creation and implementation work: Luther Monson, Lead Principal Engineer at Akamai, specifically credits Mr. Knabben's leadership in creating the Windows Operational Readiness Specification and the related Kubernetes Enhancement Proposal (KEP-2578), and further explains that Mr. Knabben's work helped define and implement a dedicated Go application to run Windows-specific tests and produce results. (*Monson Letter*, Jan. 21, 2026. **Exhibit F.2.**)

In sum, the evidence demonstrates that Mr. Knabben's contribution, *the Windows Operational Readiness (WOR) project*, is original in character. Before Mr. Knabben's work, the industry lacked a dedicated, standardized method for validating Windows-specific functionality within Kubernetes, forcing practitioners to rely on Linux-centric testing that failed to account for the unique architectural requirements of Windows nodes. Mr. Knabben filled this technical void by authoring the Windows Operational Readiness Specification and the underlying Kubernetes Enhancement Proposal (KEP-2578), creating the first-ever standardized framework for certifying Windows nodes in production. By architecting and implementing a dedicated Go-based application to execute this structured test suite, Mr. Knabben provided a novel technical solution that did not exist previously in the cloud-native ecosystem. His role as the primary creator and developer of this project is explicitly confirmed by leaders at major technology firms like Microsoft and Akamai, who recognize the WOR specification as a milestone achievement that established a new standard for operational excellence in hybrid cloud environments.

Mr. Knabben's contribution is also of major significance to the STEM (Technology) field.

The evidence further establishes that the WOR project is of major significance to the field of cloud-native computing and Kubernetes operations. As confirmed by James Sturtevant in his letter (Id.), the WOR specification solves a long-standing and industry-wide gap in validating Windows workloads in production environments. This framework is not speculative, rather it is actively relied upon by major cloud providers, including Amazon Web Services, Microsoft Azure, and Google Cloud, to validate their managed Kubernetes offerings. The ability of these global platforms to ensure consistent and reliable operation of Windows workloads directly depends on the framework Mr. Knabben helped create, demonstrating that the impact of WOR extends to the foundational infrastructure used by millions of developers and enterprises worldwide.

The independent testimony from Luther Monson (Id.) further underscores the practical and industry-wide significance of this contribution. He explains that prior to WOR, organizations faced persistent technical challenges due to the lack of Windows-specific conformance mechanisms, including incompatibilities with Linux-centric testing frameworks and the growing complexity of Windows workloads in Kubernetes environments. Mr. Knabben's solution introduced a comprehensive, structured testing system spanning nine critical functional domains, ranging from

networking and storage to Active Directory integration and advanced features such as IPv6 and Network Policy enforcement. This breadth of coverage enables organizations to validate both basic and advanced production requirements, significantly improving reliability and operational confidence. The system also produces detailed, actionable test reports, reducing diagnostic time and enabling faster resolution of issues, capabilities that are essential for enterprise-scale deployments.

Importantly, the WOR project has achieved broad adoption and integration across the Kubernetes ecosystem, corroborating its major significance. The specification was formally accepted through Kubernetes Enhancement Proposal KEP-2578 and incorporated into the Kubernetes v1.24 milestone, embedding it within the official evolution of the platform. It is maintained in an official open-source repository under the CNCF and integrated into Kubernetes continuous integration and delivery workflows, where automated systems routinely execute WOR tests. Industry adoption is further demonstrated by Kubernetes distributions such as RKE2 proactively implementing the specification, even prior to its final approval, reflecting strong demand and immediate practical value. Additionally, the framework has been incorporated into official Kubernetes documentation and widely disseminated through authoritative channels, including the Kubernetes blog and major industry conferences such as KubeCon.

Finally, the major significance of WOR must be understood in the broader context of Kubernetes' global reach. Kubernetes is used by millions of developers and the vast majority of large enterprises, including a substantial portion of Fortune 100 companies. For this reason, support for Windows workloads is **critical** for organizations operating legacy and enterprise systems, particularly in regulated industries such as finance, healthcare, and government. Through enabling standardized validation of Windows and hybrid clusters, Mr. Knabben's WOR project directly addresses a critical need affecting a substantial segment of the global technology landscape. Its adoption by leading cloud providers, integration into core project infrastructure, and widespread use by enterprise operators collectively demonstrate that the contribution is not merely useful, but of major, field-wide significance.

In conclusion, the evidence confirms that the Windows Operational Readiness project is of major significance to the field of cloud-native engineering. Mr. Knabben developed the first standardized framework for Windows certification, now formally adopted by industry giants such as AWS, Microsoft Azure, and Google Cloud, and his work has moved beyond a mere technical contribution to become a cornerstone of modern hybrid-cloud infrastructure. The integration of his specification into the official Kubernetes core milestones and its proactive adoption by commercial distributions underscore its essential role in ensuring the stability of production environments across the Fortune 500. Consequently, by providing a solution that is both foundational to the industry's leading cloud platforms and critical to the operational success of global enterprises, the WOR project squarely satisfies the second requirement of this regulatory criterion.

Loadsmart's primary Full Truckload (FTL) Transportation Management System (TMS)

Evidence that Mr. Knabben's contribution is original

Mr. Knabben's architectural development of Loadsmart's primary Full Truckload (FTL) Transportation Management System (TMS) introduced a specialized and original technical

solution to the North American logistics market. As detailed by Edward Summers, Senior Product Manager at Cedar (formerly of Loadsmart), Mr. Knabben served as the Lead Backend Engineer responsible for the architecture and integration of the FTL system with Container Port Drayage operations (**Exhibit F.5.).** In technical and operational terms, this system functioned as a fundamental shift in global logistics infrastructure by acting as an intelligent orchestration layer between marine terminals and land-based trucking fleets. His work was fundamentally original because it replaced the industry's traditional, rigid "container-specific" model, where drivers were tethered to a single, serialized unit regardless of its location, with a first-of-its-kind "container-agnostic" approach known as "Smart Drayage" or the "free-flow" model.

Traditionally, port logistics operated in a "siloed" manner; if a driver's assigned container was buried under several others, it resulted in hours of "shuffling," wasting fuel and man-hours. Mr. Knabben's original contribution transformed the container into a fungible asset by designing a distributed systems architecture that leverages real-time APIs to synchronize with Port Terminal Operating Systems. By identifying the precise stack position of thousands of containers, the system's backend logic dynamically matches incoming trucks to the most physically accessible container. This departure from established industry practices provided a novel technical mechanism to minimize yard rehandling and resolve systemic inefficiencies, effectively turning the port into a fluid, data-driven environment. Mr. Knabben's development of this architecture is confirmed as the primary technical foundation that enabled Loadsmart to automate and modernize drayage procurement for the first time in the company's history.

In sum, the evidence demonstrates that this contribution was original, as Mr. Knabben served as the Lead Backend Engineer responsible for the foundational architecture of the system. Rather than implementing existing industry templates, Mr. Knabben authored a novel "free-flow" technical model that fundamentally departed from legacy container-specific logistics, introducing a unique technical solution that did not previously exist in the North American drayage market. Consequently, his role as the primary architect and lead developer of this innovative platform establishes that the work was an original contribution of his own creation.

Mr. Knabben's contribution is also of major significance to the STEM field – industry adoption by major stakeholders, broad industry recognition, and major media attention.

Mr. Knabben's development of Loadsmart's primary Full Truckload (FTL) Transportation Management System is of major significance to the field of logistics and supply chain technology. As explained by Edward Summers (Id.), Mr. Knabben's system directly addressed entrenched inefficiencies in the North American drayage market, a sector exceeding $50 billion in annual value and involving more than 60 million container movements. Prior to this innovation, port operations were plagued by excessive wait times, lack of real-time data integration, and inefficient container handling practices that resulted in an estimated 15 million wasted labor hours and 150 million gallons of fuel annually. After introducing the Smart Drayage "free-flow" model, Mr. Knabben's system materially reduced turnaround times by **10–30%**, demonstrating a measurable and substantial operational improvement at scale.

The significance of this contribution is corroborated by its adoption and deployment by major industry stakeholders. Mr. Knabben's system formed the technological backbone of Loadsmart's collaboration with Maersk, the world's largest container shipping company, which moves

approximately 12 million containers annually (about 15% of global volume). It was also deployed in partnership with Ports America, the largest terminal operator in the United States, which manages 33 terminals across 22 cities and handles roughly 35% of U.S. container traffic. The implementation of Mr. Knabben's system at major ports such as Port Newark demonstrates that his contribution operates at the core of national and global supply chain infrastructure, affecting the movement of goods at a massive scale.

In addition, the commercial validation and institutional investment tied to this system further confirm its importance. Loadsmart secured over $130 million in funding from leading institutional investors, including BlackRock and Maersk Growth, specifically in connection with the advancement and deployment of this technology. The innovation also received coverage in prominent publications such as the Wall Street Journal, TechCrunch, FreightWaves, and VentureBeat, reflecting broad industry recognition. Statements from industry leaders, including executives at Maersk and Ports America, highlight that the system improves efficiency, increases visibility, and delivers tangible value to both carriers and cargo owners, further demonstrating its real-world impact.

In conclusion, the evidence confirms that Mr. Knabben's contribution to Loadsmart is clearly of major significance to the field. By delivering a system that measurably improves efficiency across a multi-billion-dollar sector, is adopted by the largest global shipping and port operators, and is validated through substantial institutional investment and industry recognition, his work rises well above routine engineering contributions. Accordingly, this evidence satisfies the second requirement of the regulatory criterion by demonstrating that Mr. Knabben's original contribution has had a profound and far-reaching impact on the logistics and transportation technology industry.

Organizer – Cloud Native Santa Catarina Community Group (KCG SC)

Evidence that Mr. Knabben's contribution is original

KCG SC is an original initiative conceived and established by Mr. Knabben to fill a critical void in the technological infrastructure of Southern Brazil. As detailed in the supporting letter from Thiago Finardi, Principal Platform Engineer at Itaú Unibanco (**Exhibit F.7**), before Mr. Knabben's leadership, the State of Santa Catarina lacked any officially recognized or organized CNCF community. There was no structured ecosystem for professional networking, no regular educational forums for cloud-native technologies, and no formal bridge between the regional talent pool and the global Cloud Native Computing Foundation (CNCF).

Mr. Knabben personally spearheaded the creation of this official CNCF chapter, designing its organizational structure and leading its strategic activities. A key component of this original work was his role as Program Manager and Team Lead (Organizer 1) for the inaugural Kubernetes Community Days (KCD) Floripa 2024. This event was fundamentally original as it represented the first-ever Kubernetes Community Day held in the South region of Brazil. Mr. Knabben did not merely participate in an existing conference; he authored the program, coordinated a team of organizers from top-tier firms (including Broadcom, Elastic, and Itaú), and established the formal compliance required by the CNCF to host an official community-driven event. The originality of this contribution is evidenced by the "KCD Floripa Brasil 2024" badge and the official GitHub issue #558, which documents the creation of this new regional hub under Mr. Knabben's direction.

Therefore, the evidence demonstrates that the Cloud Native Santa Catarina Community Group and KCD Floripa are original contributions of Mr. Knabben. By identifying a significant regional gap and building the first officially sanctioned CNCF community in Southern Brazil from the ground up, Mr. Knabben created a novel platform for technical exchange that did not previously exist. His role as the primary founder and lead organizer of these initiatives confirms that this is an original contribution of his own creation.

Major Significance of KCG SC and KCD Floripa to the Field

Mr. Knabben's leadership of the KCG SC community and KCD Floripa has achieved major significance by transforming the city of Florianópolis, Brazil, into a recognized global hub for cloud-native technologies. The impact of this work is reflected in its high level of professional engagement and formal institutional recognition. The community has garnered over 900 professional followers and the KCD *Floripa* event attracted approximately 200 in-person participants, democratizing access to specialized knowledge on Kubernetes, GitOps, and DevSecOps in a region previously isolated from such high-level discourse. The event featured speakers from major industry players like Grafana, iFood, and Sysdig, demonstrating that Mr. Knabben's initiative is of sufficient caliber to attract the field's leading practitioners.

Moreover, the major significance of this contribution is validated by the CNCF, which oversees the global Kubernetes ecosystem. KCD Floripa was officially endorsed and featured in the KubeWeekly Newsletter (Issue 396), which reaches a global audience of cloud-native professionals. This international visibility positions Mr. Knabben's work not just as a local meetup, but as a sanctioned part of the global CNCF roadmap. Furthermore, the initiative has secured significant industrial sponsorship from multi-national corporations such as SUSE, Cast AI, and Loadsmart, reflecting the commercial value and professional relevance of the ecosystem Mr. Knabben has built. The ongoing nature of these partnerships and the distribution of Linux Foundation certification vouchers through the community further prove that his leadership provides a sustainable and material benefit to the professional development of the cloud-native workforce.

In summary, the establishment and leadership of KCG SC and KCD Floripa are of major significance to the field of cloud-native computing. By creating the first official bridge between Southern Brazil and the global CNCF community, securing the participation of leading global technology firms, and gaining formal recognition from the highest authorities in the field, Mr. Knabben has fundamentally elevated the regional technology landscape. His work has shifted the field's geographic reach and fostered a robust, data-driven community that is now an integral part of the international Kubernetes ecosystem. Accordingly, this contribution satisfies the requirements for major significance under the regulatory criteria.

Applying the regulatory standard to the evidence presented, Mr. Knabben's contributions extend well beyond the creation of an original programs; rather, they demonstrate sustained major impact on the STEM field and industry recognition. The documented institutional implementation of his methodologies, the recognition of his work by leading experts, and the widespread media dissemination of the impact of his work collectively confirm that his contributions are of major significance. Accordingly, the record establishes, by a preponderance of the evidence, that Mr. Knabben fully meets the evidentiary criterion set forth in 8 C.F.R. § 204.5(h)(3)(v)**.** Evidence supporting this assertion is submitted under **Exhibit F**:

F.1. James Sturtevant, *Letter of Support for Amim Salum Knabben* (Jan. 18, 2026). Demonstrating both originality and major significance as the creator of the WOR specification.
F.2. Luther Monson, *Letter of Support for Amim Salum Knabben* (Jan. 21, 2026). Demonstrating both Originality and Major Significance as the leader behind KEP-2578 and explains how his original Go-application architecture solved critical industry-wide gaps in Windows worker node validation.
F.3. Kubernetes project, *Validating the Windows Cluster Operability (WOR Description),* demonstrating originality of the WOR project, proving its existence as a specialized, structured test suite within the official Kubernetes project.
F.4. GitHub, *Contributors List for kubernetes-sigs/windows-operational-readiness* demonstrating originality, showing Mr. Knabben as the top contributor and developer of the project's codebase.
F.5. Edward Summers, *Letter of Support for Amim Moises Salum Knabben* (Jan. 25, 2026). Demonstrating both originality and major significance of the "Smart Drayage" free-flow model and its significant impact.
F.6. Wall Street Journal, *Maersk Invests in Freight-Booking Startup Loadsmart* (news article), demonstrating major significance and validating the industry-wide recognition of the technology Mr. Knabben developed for Loadsmart and its importance to global shipping leaders.
F.7. Thiago Finardi, *Letter of Support for Amim Moises Salum Knabben* (Dec. 5, 2025). Demonstrating both originality and major significance, confirming Mr. Knabben as the original founder of the KCG SC community and lead organizer of the first-ever KCD in Southern Brazil.
F.8. CNCF, *KCD Floripa Brasil 2024 (December) Issue #558* (GitHub project approval), documenting the formal proposal and approval process led by Mr. Knabben to create the first community conference in the region, demonstrating its originality.
F.9. CNCF Community Platform, *Organization of KCD Floripa 2024 at CNCF KCD Brasil* (official website profiles), listing Mr. Knabben as "Organizer 1" and Program Manager, confirming his central role in developing the event's technical content.
F.10. Linux Foundation / CNCF, *Organizer Badge and Official Community Photo – KCD 2024 Floripa*, providing physical evidence of Mr. Knabben's leadership and active coordination of the team of organizers from multiple multinational technology firms.

Criterion 6. Person's authorship of scholarly articles in the field, in professional or major trade publications.

Under 8 C.F.R. § 204.5(h)(3)(vi), a petitioner may satisfy this evidentiary criterion by demonstrating authorship of scholarly articles in the field published in professional journals, major trade publications, or other major media. The USCIS Policy Manual explains that scholarly articles generally include publications reporting original research, analysis, or expert commentary intended for a specialized audience in the beneficiary's field of expertise. Such works are typically subject to editorial or peer review and are disseminated through recognized academic or professional publishing channels. See USCIS Policy Manual, Vol. 6, Pt. F, Ch. 2.

USCIS guidance further clarifies that, for fields outside traditional academia, a scholarly article is one that is written for "learned persons" in the field, defined as individuals who possess profound

knowledge gained through study and experience. Such learned persons include professionals with advanced, specialized expertise, and the focus of the inquiry is therefore on the intended audience and level of technical sophistication, rather than strictly on the format or venue of publication. Id.

In the technology field, particularly within the cloud-native and open-source community, publications such as those appearing on the Kubernetes Blog and presented at conferences like KubeCon + CloudNativeCon are expressly directed to software engineers, DevOps practitioners, cloud architects, and technical contributors, all of whom constitute "learned persons" with specialized knowledge in distributed systems and cloud infrastructure. These materials are authored by experienced professionals and require a high level of technical understanding, thereby satisfying the USCIS standard that scholarly work be written for a knowledgeable and expert audience, even where the format differs from traditional academic publications.

Authorship of Scholarly Articles – the Kubernetes blog

Mr. Amim Moises Salum Knabben has authored technical publications on the official Kubernetes Blog, including articles such as *"Defining Network Policy Conformance for Container Network Interface (CNI) Providers"* and *"Introducing the Windows Operational Readiness Specification."* These articles address complex aspects of how large-scale cloud computing systems operate and remain reliable. In simplified terms, the first article focuses on establishing standardized rules to ensure that different networking components within Kubernetes systems behave consistently and securely, while the second introduces guidelines to ensure that Windows-based environments can operate effectively within Kubernetes infrastructure. Both topics fall squarely within Mr. Knabben's field of cloud-native computing and distributed systems, as they relate to the design, reliability, and interoperability of modern application platforms used globally by enterprises and technology providers.

The Kubernetes Blog is the official publication of the Kubernetes project, a globally adopted open-source platform governed under the CNCF and serves as a primary channel for disseminating technical knowledge, updates, and best practices within the cloud-native ecosystem. Its content is authored by experienced engineers, contributors, and subject-matter experts, and is directed to a highly specialized audience of software engineers, DevOps practitioners, cloud architects, and infrastructure professionals who actively work with Kubernetes technologies. Given its technical depth, global reach, and role in communicating advancements in one of the most widely used cloud platforms in the world, the Kubernetes Blog constitutes a professional publication intended for learned persons in the field.

Scholarly Nature of the works Published by the Kubernetes blog.

Mr. Knabben's publications on the official Kubernetes Blog satisfy the first part of the USCIS Policy Manual standard for scholarly articles because they undergo a structured, expert-driven review process prior to publication. Official Kubernetes guidance confirms that proposed articles must be submitted to the editorial team, assigned to experienced contributors, and reviewed, edited, and approved before publication, ensuring that only technically accurate, relevant, and high-quality content is disseminated to the community **(Exhibit G.3.)**. Although this process differs from traditional anonymous academic peer review, it constitutes a rigorous expert evaluation framework

administered by recognized contributors and maintainers within the Kubernetes ecosystem, thereby fulfilling the functional equivalent of peer review as contemplated by USCIS for technical fields.

Moreover, Mr. Knabben's articles, such as those addressing network policy conformance for Container Network Interface (CNI) providers and operational readiness standards for Windows environments, reflect original technical analysis, experimentation, and practical innovation within the field of cloud-native computing. These works are authored by Mr. Knabben in his capacity as an experienced engineer and contributor to Kubernetes, thereby satisfying the requirement that scholarly articles be written by experts in the field. Consistent with USCIS guidance, these publications are directed to "learned persons," namely software engineers, cloud architects, and DevOps professionals who possess advanced knowledge of distributed systems and infrastructure. The technical depth, specialized subject matter, and reliance on domain-specific concepts demonstrate that the intended audience is composed of individuals with profound knowledge in the field, thereby meeting the Policy Manual's definition of scholarly work.

Kubernetes blog standing as a professional publication and its intended audience.

In evaluating the published material, it must determine whether the publication qualifies as a professional publication, major trade publication, or major media publication, and that this determination is based on specific contextual factors. In particular, for professional publications, USCIS considers the intended audience, focusing on whether the content is directed to individuals with specialized knowledge in the field, while for major media, it evaluates circulation or readership relative to other media within the field. Accordingly, the analysis is not limited to the format of the publication, but rather emphasizes the nature of its audience and its role within the relevant professional or industry landscape. See USCIS Policy Manual, Vol. 6, Pt. F, Ch. 2.

In this case, the Kubernetes Blog clearly qualifies as a professional publication under USCIS guidance because it is directed to professionals within the field of cloud-native computing and distributed systems. As the official publication of the Kubernetes project, it serves as a primary source of technical information for individuals actively working with this technology. The record demonstrates that the blog's content is specifically intended for a specialized audience, including software engineers, DevOps practitioners, cloud architects, and Kubernetes contributors, all of whom possess advanced, field-specific knowledge. The technical depth of the articles, the use of domain-specific terminology, and the focus on infrastructure, networking, and system reliability further confirm that the intended readership consists of "learned persons" within the meaning of the USCIS Policy Manual.

Additionally, this conclusion is corroborated by third-party industry sources, which identify the Kubernetes Blog as a leading and authoritative resource in the field. For example, the evidence shows that the Kubernetes.io Blog is recognized as a primary source for anyone working with Kubernetes, providing expert insights, feature updates, and community developments relied upon by practitioners worldwide. Accordingly, because the publication is directed to a clearly defined professional audience and is recognized within the industry as a central source of technical knowledge, it satisfies the USCIS requirement of a professional publication without the need to establish circulation metrics, yet solely its intended audience, thereby meeting the second part of the evidentiary standards.

Thus, the record demonstrates that Mr. Knabben's authored works represent scholarly publications directed toward a professional audience within the field of kubernetes and cloud-natie. These publications therefore fall within the types of scholarly authorship contemplated by 8 C.F.R. § 204.5(h)(3)(vi) and the USCIS Policy Manual, which recognizes authorship of scholarly works disseminated through professional publications within the beneficiary's field.

To demonstrate that Mr. Knabben meets each requirement for this criterion, we are submitting the following supporting documents under **Exhibit G:**

G.1. Kubernetes Blog article, *Defining Network Policy Conformance for Container Network Interface (CNI) Providers*, authored by Matt Fenwick, Jay Vyas, Ricardo Katz, Amim Knabben, Douglas Schilling Landgraf, and Christopher Tomkins (Apr. 20, 2021), available at Kubernetes.io, demonstrating that Mr. Knabben is a named co-author of a technical publication in his field.
G.2. Kubernetes Blog article, *Introducing the Windows Operational Readiness Specification*, authored by Jay Vyas, Amim Knabben, and Tatenda Zifudzi (Apr. 3, 2024), available at Kubernetes.io, demonstrating that Mr. Knabben is a named co-author of a technical publication in his field.
G.3. Kubernetes official documentation, *Submitting Articles to Kubernetes Blogs*, describing the structured editorial and review process, including assignment of a blog editor, peer "writing buddy" review, and final approval prior to publication, demonstrating that submitted works undergo expert review and approval, thereby qualifying as scholarly publications within the meaning of USCIS guidance.
G.4. Third-party confirmation, *Top Kubernetes Blogs to Follow for Expert Insights* (Kubegrade), identifying the Kubernetes.io Blog as the official Kubernetes publication and a primary source of information for professionals working with Kubernetes, thereby demonstrating its intended audience of specialized practitioners and its standing as a professional publication in the field.
G.5. Letter from Antonio Ojea Senior Staff Engineer, Google, dated December 5, 2025, demonstrating the scholarly nature of Mr. Knabben's publications.

Therefore, the evidence establishes that Mr. Knabben is the author scholarly articles in the technology in professional venues, fully satisfying the authorship criterion under 8 C.F.R. § 204.5(h)(3)(vi) and corresponding USCIS policy guidance.

Criterion 7. Display of the person's work in the field in Public Exhibitions – submitted as comparable evidence.

For the fulfillment of this eligibility criterion under 8 CFR 204.5(h)(3)(vii), USCIS first determines whether the work that was displayed is the person's work product. Second, USCIS determines whether the venues (virtual or otherwise) were a public showing as per *Merriam-Webster Dictionaries*. Merriam-Webster's online dictionary defines "exhibition" as a public showing (as of works of art, objects of manufacture, or athletic skill). The policy continues with additional clarifications by stating that "While the dictionary definition includes public showings other than those that are artistic in nature, the plain language of the criterion includes the modifier "artistic" and explicitly requires that the exhibitions or showcases be artistic in nature. USCIS only considers

non-artistic exhibitions or showcases as part of a properly supported claim of comparable evidence". See U.S. Citizenship & Immigration Services (USCIS), Policy Manual, Vol. 6, Part F, Ch. 2, § (A)(2).

In addition, according to the USCIS Policy Manual, "petitioners may submit comparable evidence … if the evidentiary criteria **do not readily apply to the person's occupation**." U.S. Citizenship & Immigr. Servs., Policy Manual, vol. 6, pt. F, ch. 5, § B(2). (*See* 8 C.F.R. § 204.5(h)(4)).

Mr. Knabben's case merits a favorable adjudication of this criterion as comparable evidence. This specific regulatory criterion does not readily apply to his field of endeavor, STEM – Cloud-Native Infrastructure and Kubernetes. Criterion (vii) refers to exhibitions or showcases of an alien's work in the arts, but for scientists and technology professionals, such as Mr. Knabben, the professional equivalent is the presentation of original research at prestigious scientific congresses and conferences. Mr. Knabben's original research has been co-displayed at such prestigious national and international forums, where his findings have been disseminated to and critically observed by distinguished experts worldwide. These presentations constitute a professional equivalent to exhibitions in the arts and therefore serve as valid comparable evidence under the regulation.

Additionally, while these events are designed primarily for professionals, they are often open to the public and technology enthusiasts, thereby serving a similar function of public display and recognition of one's work. Accordingly, Mr. Knabben's display if his work at these nationally and internationally recognized meetings is directly analogous to the exhibitions contemplated by the regulation. Once it is not directly applied to his field, it can be recognized as comparable evidence.

KubeCon+CloudNativeCon North America 2022

Mr. Knabben has performed in a role comparable to presentation at artistic exhibitions or showcases through his participation as a speaker at KubeCon + CloudNativeCon North America 2022, one of the most prominent global conferences in the field of cloud-native computing. Official records confirm that Mr. Knabben was selected to present his work on Windows support in Kubernetes, including the Windows Operational Readiness initiative, before a large, specialized audience of industry professionals. Speaker selection at KubeCon is highly competitive and subject to rigorous peer review, ensuring that only individuals with recognized expertise and meaningful contributions to the field are chosen. In this capacity, Mr. Knabben's work was not merely published or documented but publicly presented and showcased, demonstrating his technical achievements before a live audience in a manner directly analogous to how artists exhibit their work in curated venues.

KubeCon + CloudNativeCon functions as a premier global exhibition platform for technological innovation, comparable in purpose and structure to exhibitions in the artistic field. Organized by the Cloud Native Computing Foundation under the Linux Foundation, the conference attracts thousands of attendees (over 12,000 participants), including engineers, researchers, and executives from leading global organizations. Much like an art exhibition where selected works are displayed to convey innovation, creativity, and impact, KubeCon serves as a curated forum where cutting-edge technological contributions are presented, evaluated, and disseminated.

Under the Merriam-Webster definition of "exhibition" as a "public showing," Mr. Knabben's presentation squarely qualifies, as it involved the public demonstration of his original technical

work to a broad professional audience. Whether conducted in-person or in hybrid/virtual formats, such presentations are recognized within the field as formal showcases of innovation, where selected speakers present advancements that shape industry practices. Accordingly, Mr. Knabben's participation as a speaker at KubeCon constitutes comparable evidence of display of his work in a manner analogous to artistic exhibitions or showcases under 8 C.F.R. § 204.5(h)(4).

Importantly, USCIS Policy Manual explicitly recognizes that, particularly in STEM fields, comparable evidence may include presentations at major trade shows or professional forums when a listed criterion is not easily applicable. Mr. Knabben's documented work presentations at major international technology conference therefore constitute evidence of comparable significance to the artistic exhibition criterion, as they establish public display of his work product before a recognized professional audience as well as to the broader community.

To demonstrate that Mr. Knabben meets this regulatory criterion, as comparable evidence, we are submitting the following documents under **Exhibit H**:

> **H.1.** The Linux Foundation / Cloud Native Computing Foundation, *Official Speaker Confirmation for Amim Knabben – KubeCon + CloudNativeCon North America 2022*, confirming that Mr. Knabben displayed his technical work and expertise to a curated audience of thousands of specialized professionals in Detroit, MI.
> **H.2.** Kubernetes (Official YouTube Channel), *Kubernetes SIG Network Meeting Presentation Screenshot* (May 27, 2021), demonstrating the public display of the Petitioner's technical work via virtual exhibition.
> **H.3.** Cloud Native Computing Foundation (CNCF), *KubeCon + CloudNativeCon Performance Schedule and Speaker Bio* (Oct. 24–28, 2022) demonstrating the formal registration and scheduling of Mr. Knabben's "public showing."

Thus, Mr. Knabben comfortably meets this criterion as the submitted evidence demonstrates his work product was displayed in major technology and public events. Although this criterion is not readily applicable to his occupation, we kindly ask the adjudicator to consider it as comparable evidence under 8 C.F.R. § 204.5(h)(4).

Criterion 8. Evidence that the person has performed in a leading or critical role for organizations or establishments of distinguished reputation.

To demonstrate beneficiary's eligibility under this criterion (8 CFR 204.5(h)(3)(viii) USCIS first evaluates whether the person has performed in a leading or critical role for an organization, establishment, or a division or department of an organization or establishment as well as whether the role is (or was) leading or critical. Second, USCIS determines whether the organization or establishment (department or division) for which the petitioner holds or held a leading or critical role, is of distinguished reputation.

Broadcom inc. (former VMware) - Windows Technical Lead for the Tanzu Kubernetes Grid (TKG)

Mr. Knabben performed leading and critical roles within the organization.

Mr. Knabben has held progressively leadership roles within VMware (now Broadcom Inc.), demonstrating a clear trajectory of increasing responsibility, technical authority, and organizational impact. He initially joined VMware as a Senior Member of Technical Staff from 2021–2023 (**Exhibit A.2.)**, where he was entrusted with designing and building critical infrastructure systems and automated deployment pipelines supporting the company's enterprise Kubernetes offerings. In this role, he servied as Tech Lead for the node management team, specializing in Windows-based Kubernetes infrastructure. His leadership responsibilities included guiding technical direction, mentoring engineers, and directly contributing to the upstream Kubernetes project, an uncommon level of influence for his position and indicative of early recognition of his expertise.

In evaluating whether a petitioner's role qualifies as "leading," USCIS guidance clarifies that "officers look at whether the evidence establishes that the person is (or was) a leader within the organization or establishment or a division or department thereof," noting specifically that "[a] title, with appropriate matching duties, can help to establish that a role is (or was), in fact, leading." *See* U.S. Citizenship and Immigration Services, *USCIS Policy Manual*, vol. 6, pt. F, ch. 2, § B(2). Consistent with this standard, Mr. Knabben's appointment as Principal Software Engineer and Group Tech Lead at Broadcom Inc. serves as a *prima facie* indicator of his leadership within the organization's Tanzu Kubernetes Grid division, as his title is supported by "appropriate matching duties" that include overseeing a multi-million-dollar product line and providing technical and strategic guidance to a cross-functional team of more than 30 engineers across five specialized product areas. *Id.*

Mr. Knabben's leadership role became even more pronounced through his position as Security Tech Lead for Tanzu Kubernetes Grid (TKG), one of VMware's flagship enterprise products. In this capacity, he was responsible for architecting and implementing critical security solutions for Kubernetes environments used by high-profile enterprise and **U.S. federal government clients**, requiring compliance with stringent standards such as STIG and CIS benchmarks[14]. He led a team of engineers in designing and validating these security controls, demonstrating technical authority and managerial oversight. His work was sufficiently impactful to be incorporated into official product documentation, reflecting that his contributions were not ancillary, but rather foundational to the product's security posture and customer trust. Therefore, it squarely meets the definition of "critical role" when evaluating his duties and impact within Vmware inc.

Following VMware's acquisition by Broadcom, Mr. Knabben was promoted to Principal Software Engineer and Group Tech Lead (2023–Present) for the Tanzu Kubernetes Grid product line, further evidencing his progression into senior leadership. In this role, he oversees a multi-million-dollar revenue product and provides technical leadership to cross-functional teams of over 30 engineers across five specialized domains. He works directly with executive leadership, including Directors of Engineering and Product, to define product strategy, roadmaps, and execution plans aligned with evolving market demands. This level of responsibility, both in terms of job title, team size, and product impact, places him in a position of significant authority within the organization.

The high-level and critical nature of Mr. Knabben's contributions is also corroborated by the **Tanzu R&D Engineering Top Performer Achievement Award** he received from Broadcom Inc.

[14] STIG (Security Technical Implementation Guide) is a set of rules used by the DoD to harden systems, while CIS (Center for Internet Security) Benchmarks are globally recognized best practices for securing IT systems and data against cyberattacks.

during the fourth quarter of fiscal year 2024. This prestigious recognition is an elite honor reserved for only a small percentage of engineers, specifically, only 10 individuals across a global division of hundreds of highly qualified professionals working for a Fortune 500 company that serves 80 percent of the Fortune 500 market. This award recognizes the specific leadership milestones Mr. Knabben achieved, including maintaining critical product releases during a massive 85 percent reduction in team size and personally unblocking complex technical issues to ensure a reduction in customer escalation times from 60 days to under three days.

For these reasons, Mr. Knabben's roles qualify as **both leadership and critical positions** within Broadcom/VMware. His leadership is demonstrated through direct team management, mentorship, and strategic decision-making responsibilities across large engineering groups. At the same time, his positions are critical because they are tied to **core infrastructure products (Tanzu Kubernetes Grid)** that serve enterprise and government clients and generate substantial revenue for the company. His responsibility for security architecture, compliance standards, and hybrid Kubernetes infrastructure places him at the center of product reliability, customer trust, and regulatory adherence, functions that are essential to the organization's success.

Moreover, employer recognition, documented contributions to official product materials, and direct collaboration with senior leadership confirm that his role is central to the company's technical and commercial operations. First, a letter from Shashank Girish, Engineering Manager, Broadcom Inc., confirms:

> Mr. Knabben served as Group Tech Lead for the Tanzu Kubernetes Grid product line, which generated annual revenue of millions of dollars year over year. He provided technical guidance to a cross-functional team of more than 30 professionals, including software engineers, senior engineers, and engineering managers. These professionals were organized into five specialized product areas.

Second, a letter from Ellen Perito Körbes, Senior Product Manager at Broadcom.inc. states that:

> Mr. Knabben served as the TKG Security Tech Lead for the Tanzu Kubernetes Grid product at Broadcom Inc. a Fortune 500 company and global leader in enterprise software infrastructure with annual revenue exceeding $ 35 billion. He was responsible for architecting and leading critical security solutions implementations for Kubernetes infrastructure used by high-level federal and enterprise customers, including United States government agencies that require compliance with the Security Technical Implementation Guide and the CIS benchmarks. […] Mr. Knabben's contributions were essential for the success of Tanzu Kubernetes Grid and for Broadcom's positioning in highly regulated markets. One concrete example was his leadership in delivering fully hardened Kubernetes nodes that met CIS and STIG requirements for the Halifax release of TKG, achieving an average compliance rate of 75 percent. This hardened release was a prerequisite for Broadcom to commercialize Tanzu Kubernetes Grid to United States federal agencies, which represent a multibillion-dollar market, as well as to the private sector.

Letter from Shashank Girish, Engineering Manager, Broadcom Inc., also corroborates to Mr. Knabben's leading and critical role in the organization by explaining the relevance of the award received by Mr. Knabben while working for Broadcom:

> The basis for Mr. Knabben's recognition rewards the leadership in supporting the transformation of the team's knowledge infrastructure, delivering two product releases on schedule during a fiscal year in which the team was operating with only 15 percent of its original headcount, the assumption of responsibilities to unblock critical release issues by taking ownership for product launches in AMER time zones, and support to the team in reducing the average time to resolve the problems from sixty days to less than thirty days through proactive engagement with engineering. […] The Tanzu R&D Engineering Top Performer award is highly competitive within our organization. The Tanzu R&D Engineering division employs hundreds of highly qualified engineers worldwide. The recognition is reserved for only a small percentage of engineers. During the relevant period, only 10 engineers across the entire unit received the Top Performer award.

Finally letter from Jay Vyas, former Staff Software Engineer, Broadcom, confirms that:

> He [Mr. Knabben] assumed technical leadership for the design and delivery of this capability, leading the approval of a Tanzu Enhancement Proposal, implementing automated testing workflows, and producing architecture guidance and training materials […] This work was critical to maintaining competitiveness with Azure AKS and AWS EKS, supporting customer retention, and expanding VMware's market presence in Windows-dependent environments.

USCIS expressly states that this is "one criterion where letters from persons with personal knowledge of the significance of the person's leading or critical role can be particularly helpful to officers in making this determination, so long as the letters contain detailed and probative information that specifically addresses how the person's role for the organization, establishment, division, or department was leading or critical." U.S. Citizenship & Immigr. Servs., *USCIS Policy Manual*, vol. 6, pt. F, ch. 2, § B(8). USCIS further provides that "[e]vidence of experience must consist of letters from employers." *Id.*

The Broadcom/VMware letters align exactly with that rule and are highly persuasive because they are employer letters from persons with **direct personal knowledge** of Mr. Knabben's work. They provide the kind of "detailed and probative information" USCIS requires: his exact titles (Security Tech Lead, Windows Tech Lead, Node Tech Lead, Group Tech Lead); the scope of his authority (final architectural approval, roadmap authority, executive decision-making authority); the size of the teams he led (4–6 engineers, 8 engineers, and 30+ professionals across five product areas); the commercial importance of the product (millions in annual revenue); and specific critical outcomes. Thus, the evidence in Mr. Knabben's case provide strong and policy-compliant proof that he served in both leading and critical roles within Broadcom inc. (former Vmware).

Broadcom.inc (formely Vmware) is an organization of distinguished reputation.

Broadcom Inc. is a U.S.-based multinational technology company specializing in semiconductor and infrastructure software solutions, including cloud computing and virtualization through its acquisition of VMware in 2023, one of the largest technology acquisitions in history. It serves critical industries such as data centers, networking, and enterprise software, and is consistently ranked among the largest corporations in the United States, including inclusion in the Fortune 500.

Broadcom possesses a distinguished reputation in the global technology sector due to its scale, innovation, and pervasive influence across digital infrastructure. The company's technologies are foundational to modern computing systems, with reports indicating that more than 99% of global internet traffic relies on some form of Broadcom technology, underscoring its central role in the digital economy. Additionally, industry analyses classify Broadcom (including VMware) as a top-tier software vendor with a robust portfolio spanning cloud computing, automation, and enterprise infrastructure, serving a wide range of industries such as finance, healthcare, government, and telecommunications.

Its reputation is reinforced by recognition from industry organizations, partnerships, and global client adoption. Broadcom regularly honors leading partners and customers through initiatives such as its VMware Cloud Service Provider Awards, reflecting a broad and sophisticated ecosystem of enterprise users and collaborators worldwide. The company's products are also widely reviewed and utilized by enterprise clients through platforms such as Gartner Peer Insights, evidencing widespread adoption and reliance by major organizations. Together, these factors, global market reach, critical technological infrastructure, industry recognition, and extensive enterprise adoption, demonstrate that Broadcom maintains a highly distinguished reputation within the technology and cloud computing industries**.**

Accordingly, Mr. Knabben has performed a critical *and* leading role within Broadcom Inc. (formerly VMware), an organization of distinguished reputation, as demonstrated by its Fortune 500 status, global market leadership, and widespread adoption of its technologies across essential digital infrastructure. His contributions within this highly reputable organization reflect a level of responsibility and impact consistent with the standards set forth under 8 C.F.R. § 204.5(h)(3)(viii) and the USCIS Policy Manual.

The Linux Foundation – Kubernetes and CNCF – Ambassador

Mr. Knabben performs a critical role for Linux Foundation.

Mr. Knabben's appointment and service as a CNCF Ambassador for the Linux Foundation constitutes a critical role for one of the most prestigious and influential organizations in the global technology sector. As a CNCF Ambassador, Mr. Knabben acts as a high-level technical representative for an organization that hosts the world's most mission-critical open-source projects, including Kubernetes, Prometheus, and Istio, which are utilized by **96% of organizations globally** and **5.6 million developers worldwide**. Within this vast ecosystem, the role of Ambassador is not honorary but is a functional and highly selective leadership position reserved for individuals who have demonstrated sustained technical leadership and are capable of shaping the growth of cloud-native infrastructure on a regional and global scale.

Mr. Knabben's role is critical because he serves as a primary architect of the cloud-native ecosystem in Latin America, a mission evidenced by his selection as one of the **first four Ambassadors in Brazil**. He provides the essential organizational and technical bridge between the Linux Foundation and the burgeoning Brazilian tech market, founding the Cloud Native Santa Catarina Community Group and leading the inaugural Kubernetes Community Days (KCD) Floripa**.** His work as a Track Chair and Program Committee member for flagship KubeCon + CloudNativeCon events across three continents further confirms that his leadership is essential to the Linux Foundation's mission of maintaining the technical quality and strategic direction of the world's largest open-source conferences. Additionally, his status as a "Golden Kubestronaut", attained by completing the full suite of specialized Kubernetes certifications, qualifies him as a top-tier subject matter expert whose mentorship and advocacy are vital to the professional development of the global Kubernetes workforce.

The importance of this role is directly corroborated by the Linux Foundation through a letter from Audra Montenegro, Community Outreach Manager at the CNCF, which confirms that Mr. Knabben's role is a product of rigorous selection based on proven leadership. To satisfy the USCIS policy requirement for employer confirmation of a critical role, the letter provides specific evidence of his essential impact:

> The role requires rigorous selection, including proven technical contributions... and active leadership through SIG/TAG participation, Kubernetes Community Days, or CNCF event program committees... Mr. Knabben was selected among the first four Ambassadors in Brazil, reflecting his sustained contributions, such as: Launched and led Kubernetes Community Days Floripa, establishing a sustained local CNCF and Kubernetes community through in-person and virtual events; Served on KubeCon + CloudNativeCon program committees (2023-2024); [and] promoted to Track Chair at KubeCon + CloudNativeCon North America 2023.

In sum, the evidence establishes that Mr. Knabben has performed a critical role for the Linux Foundation and its Cloud Native Computing Foundation (CNCF). By serving as an official Ambassador, Program Committee Track Chair, and regional founder, Mr. Knabben provided leadership that was essential to the Linux Foundation's global outreach and its ability to maintain technical standards across its most significant projects and events.

Linux Foundation/CNCF Foundation is an organization of distinguished reputation.

The Linux Foundation and its Cloud Native Computing Foundation (CNCF) possess a distinguished reputation within the meaning of the USCIS Policy Manual, as demonstrated by their central role in developing, standardizing, and governing the most widely adopted open-source technologies in modern computing. The Linux Foundation serves as a global consortium that

supports critical infrastructure projects across cloud computing, networking, artificial intelligence, and enterprise software, while CNCF specifically oversees the development and growth of cloud-native technologies, including Kubernetes, widely regarded as the industry standard for container orchestration. The foundational role of these organizations in shaping modern digital infrastructure reflects a level of prominence and recognition consistent with highly reputable institutions in the field.

Moreover, the global adoption and industry reliance on CNCF-hosted technologies**,** particularly Kubernetes reinforces their standing of distinguished reputation in the field. According to CNCF and Linux Foundation research, between 93% and 98% of organizations are using, piloting, or evaluating cloud-native technologies, with Kubernetes becoming the backbone of modern enterprise infrastructure and a default platform for mission-critical applications. Independent industry analyses confirm that Kubernetes is used by a majority of enterprises and continues to expand rapidly, with projections exceeding 90% enterprise adoption in the near future. This near-universal adoption demonstrates that technologies governed by CNCF are not merely influential but **essential to the operation of global digital systems**, including cloud platforms, financial services, telecommunications, and artificial intelligence workloads.

In addition, the Linux Foundation and CNCF are supported by a broad and prestigious ecosystem of corporate members and contributors, including leading technology companies that collectively shape global computing standards. CNCF alone is backed by hundreds of member organizations and originated with founding members such as Google, IBM, Intel, Cisco, and VMware, reflecting deep industry trust and collaboration at the highest levels of the technology sector. These organizations contribute resources, engineering talent, and governance participation, reinforcing CNCF's position as a central authority in cloud-native innovation and standardization**.**

Lastly, the organizations' recognized leadership in research, standard-setting, and global community coordination further confirms their distinguished reputation. The Linux Foundation produces widely cited industry reports and empirical research on open-source adoption and technological trends, while CNCF conducts annual surveys and publishes data relied upon by enterprises, policymakers, and technology leaders worldwide. Their ability to convene thousands of developers, corporations, and institutions around shared technological standards underscores their exceptional standing, credibility, and influence within the global technology ecosystem. Together, these factors establish that the Linux Foundation and CNCF clearly qualify as organizations of distinguished reputation under USCIS standards.

Accordingly, Mr. Knabben has performed a leading and critical role within Broadcom Inc. (formerly VMware) and the Linux Foundation and Cloud Native Computing Foundation (CNCF)**,** as evidenced by his significant responsibilities, technical contributions, and influence within these organizations. These entities are, in turn, organizations of distinguished reputation within the meaning of 8 C.F.R. § 204.5(h)(3)(viii) and the USCIS Policy Manual, as demonstrated by their global leadership, widespread adoption of their technologies, and central role in shaping modern digital infrastructure. The evidence establishing that Mr. Knabben satisfies both parts of this criterion is provided under **Exhibit I**:

> **I.1.** Letter from Shashank Girish, Engineering Manager at Broadcom Inc., demonstrating that Mr. Knabben's work has been leading and critical to the organization.

I.2. Letter from Jay Vyas, Staff Software Engineer at Tesla and former Staff Software Engineer at Broadcom, confirming Mr. Knabben's critical and leading role as Windows Technical Lead and Node Technical Lead for the Tanzu Kubernetes Grid platform.

I.3. Letter from Shashank Girish, Engineering Manager at Broadcom Inc., describing Mr. Knabben's position as Group Technical Lead for the Tanzu Kubernetes Grid product line and direct impact on a revenue-generating enterprise platform serving Fortune 500 customers.

I.4. Letter from Ellen Perito Körbes, Senior Product Manager, detailing Mr. Knabben's role as Security Technical Lead for Tanzu Kubernetes Grid, including his authority over security architecture, leadership of compliance initiatives for federal and enterprise customers, and contributions to product commercialization and market expansion.

I.5. Tanzu R&D Engineering Top Performer Achievement Award issued by Broadcom Inc., formally recognizing Mr. Knabben's outstanding technical leadership, performance, and critical contributions to the organization's engineering objectives.

I.6. Internal recognition issued through VMware's "At Our Best" employee recognition program, documenting peer acknowledgment of Mr. Knabben's technical leadership, collaboration, and significant contributions to critical engineering components, demonstrating that his work has been critical and leading to the organization.

I.7. Documentation of the Tanzu Kubernetes Grid (TKG) product and its security and compliance framework, including architecture materials and detailed STIG (Security Technical Implementation Guide) results and hardening configurations, submitted to demonstrate that Mr. Knabben, as Security Technical Lead, was responsible for architecting and implementing critical security solutions for Kubernetes infrastructure used by high-level federal and enterprise customers, including U.S. government agencies requiring strict CIS and STIG compliance.

I.8. Industry report from apps run the world identifying Broadcom Inc. (including VMware) as a Top-Tier Software Vendor in the APPS and Cloud Top 500 Market Report, demonstrating its distinguished reputation.

I.9. Official Broadcom publication announcing the 2025 VMware Cloud Service Provider Partner Awards, recognizing global partners for innovation, growth, and excellence, evidencing Broadcom's distinguished reputation.

I.10. Independent profile from Forbes identifying Broadcom Inc. as a leading global technology company and listing it among America's Best Companies (2026) **and** America's Best Large Employers (2026), reflecting national recognition, scale, and industry prominence.

I.11. Letter from Audra Montenegro, Community Outreach Manager at the Cloud Native Computing Foundation (CNCF), demonstrating that his work has been critical to the organization's mission and ecosystem development.

I.12. Industry report from the Cloud Native Computing Foundation (CNCF) and SlashData documenting the global scale and influence of the cloud-native ecosystem, including the growth to approximately 19.9 million developers worldwide, demonstrating that it is an organization of distinguished reputation with substantial global impact and adoption.

Therefore, Mr. Knabben satisfies the regulatory requirements of 8 C.F.R. § 204.5(h)(3)(viii) and USCIS standards.

Criterion 9. Evidence that the person has commanded a high salary or other significantly high remuneration for services in relation to others in the field.

The regulation provides that a petitioner may satisfy this criterion by submitting evidence that the beneficiary has commanded a high salary or other significantly high remuneration for services, in relation to others in the field. 8 C.F.R. § 204.5(h)(3)(ix). The USCIS Policy Manual clarifies that remuneration may include not only wages but also bonuses, equity distributions, profit participation, dividends, or other forms of compensation derived from professional activities, and that evidence may include tax records, accountant statements, or financial documentation demonstrating the beneficiary's earnings relative to the field. *See* U.S. Citizenship & Immigr. Servs., USCIS Policy Manual, vol. 6, pt. F, ch. 2(D)(2).

Mr. Knabben's compensation was earned in the field of advanced software engineering and cloud-native infrastructure, specifically through his work as a Senior Software Engineer and Lead Backend Engineer at Loadsmart. The payments reflected in the records correspond to professional services rendered in highly specialized engineering roles. It shows that Mr. Knabben received substantially high remuneration in Brazilian reais (BRL) for his services at Loadsmart, including individual payments reaching approximately R$38,800.00 BRL per transaction, as well as recurring payments in the range of R$35,000.00 BRL and above per month. These amounts are significantly elevated when compared to average compensation levels in the Brazilian technology market, particularly for the relevant time period, and are consistent with compensation paid to highly skilled engineers working on mission-critical systems for international companies.

Importantly, the structure of these payments indicates that they constitute professional remuneration (contract-based or service-based payments) rather than a fixed traditional salary. The records show payments categorized as "services," reflecting compensation for specialized engineering work delivered, likely under an international or contractor arrangement, rather than standard payroll disbursements. This type of compensation model is common for senior engineers working remotely for U.S.-based companies while residing abroad, particularly in high-demand fields such as cloud computing and distributed systems.

The April 2026 Indeed salary survey is a credible labor-market evidence compiled by a major employment platform from 1.5k reported salaries and is time-stamped as updated April 6, 2026, reflecting current compensation conditions for software engineers in Brazil. Indeed reports an **average base salary of R$10,618 per month** for "Software Engineer" roles in Brazil, with the highest-paying nearby city figures in the survey remaining far below Mr. Knabben's compensation (e.g., Osasco: R$14,889/month**;** Florianópolis: R$13,047/month).

By contrast, Mr. Knabben's remuneration records show multiple high-value monthly payments from Loadsmart for "Services," including "June 2021 Payroll" of R$35,000.00, "July 2021 Payroll**"** of R$38,000.00, and a payment of R$38,800.00 dated Aug. 30, 202. In addition, Mr. Knabben's most recent compensation records show remuneration substantially above prevailing market pay for software engineers in Brazil: his October 2025 payslip reflects a contracted monthly salary of R$35,824.19 (in addition to other compensation components).

Accordingly, Mr. Knabben's contracted salary alone is approximately 3.4× the national average and about 2.4× the highest city benchmark reported by Indeed, demonstrating that his remuneration is substantially high for the field. Annualized, this is approximately R$420,000–R$465,600 per year**,** which places him **above the 90th percentile (top decile)** when compared to Brazil software

engineer compensation percentiles reported by Levels.fyi (90th percentile total compensation: R$374,000/year).

In sum, the evidence confirms that Mr. Knabben's remuneration was directly tied to his work in highly specialized, high-impact software engineering roles and that he received substantially high remuneration reflective of his expertise and the critical nature of his contributions. The level and structure of these payments further support that he was operating at the top tier of his professional field, receiving remuneration commensurate with advanced technical leadership and the development of core enterprise systems.

Accordingly, the record establishes that Mr. Knabben has commanded significantly high remuneration for services in relation to others in the field, consistent with the evidentiary criterion set forth under 8 C.F.R. § 204.5(h)(3)(ix) and interpreted in the USCIS Policy Manual.

To demonstrate that Dr. Martins meets this criterion, we are submitting the supporting evidence under **Exhibit J**:

> **J.1.** VMware Software e Serviços Brasil Ltda., *Informe de Rendimentos* (Calendar year 2024) (IR2024), showing Mr. Knabben's annual wage income and related compensation items.
> **J.2**. VMware Software e Serviços Brasil Ltda. payslips covering 2023–2025, including base salary, bonuses, and RSU-related entries.
> **J.3.** Veeem (payment platform) transactions screenshot reflecting payments from Loadsmart.
> **J.4.** Indeed, *Software Engineer Salary in Brazil* (salary survey; updated Apr. 6, 2026; 1.5k salaries reported), benchmarking average base salary and city-level ranges and demonstrating Mr. Knabben's remuneration for services in substantially high.

Hence, Mr. Knabben fully meets the criterion under 8 C.F.R. § 204.5(h)(3)(ix).

Totality of Evidence - Final Merit Determination

In *Kazarian v. USCIS,* 596 F.3d 1115 (9th Cir. 2010), the court ruled that USCIS officers should use a two-step analysis to evaluate the evidence submitted with the petition to demonstrate eligibility for classification as a person with extraordinary ability in the sciences, arts, education, business, or athletics through sustained national or international acclaim indicating that the person is one of that small percentage who has risen to the very top of the field of endeavor. The officer applies a preponderance of the evidence standard when making this determination.

Furthermore, according to the USCIS Manual: "At this step, officers consider any potentially relevant evidence in the record, even if such evidence does not fit one of the above regulatory criteria or was not presented as comparable evidence. The officers consider all the evidence in the totality. Some evidence may weigh more favorably on its own, while other evidence is more persuasive when viewed with other evidence." (Emphasis added). *See* U.S. Citizenship & Immigr. Servs., Policy Manual, vol. 6, pt. F, ch. 2, § A(2) (2025), https://www.uscis.gov/policy-manual.

After establishing that Mr. Knabben clearly meets **all** eligibility criteria applied to the STEM (technology field), it is also highly persuasive that he meets, when applying the preponderance of evidence standard ("more likely than not"), the character of extraordinary ability in his field. The extensive record of his career accomplishments, the several mentions to her name and her method in the major media and professional venues, the originality and major impact of her patented method Oficina da Memoria®, her published articles in high-ranking Journals with great impact factor, the high-profile original contributions to academia and groundbreaking research, her critical roles for organizations of distinguished reputation, and her substantially high remuneration, are sufficient to demonstrate her sustained national and international acclaim in her field throughout Brazil.

First, the documentary evidence reflects clear, sustained acclaim over time, not isolated achievements. Mr. Knabben's career spans more than two decades of continuous advancement from foundational infrastructure roles to globally recognized leadership in cloud-native computing. His progression includes critical engineering and architectural contributions in both private industry and globally recognized open-source ecosystems, culminating in his current position as Principal Software Engineer and Group Technical Lead at Broadcom. This successful trajectory, supported by awards, leadership roles, and peer recognition, demonstrates long-term recognition rather than momentary success, which is a key consideration under the final merits analysis.

Second, the record establishes that Mr. Knabben's achievements have been recognized at a national and international level by leading experts and institutions in his field. His receipt of the Kubernetes SIG Windows Contributor Award, selection as a CNCF Ambassador, participation as a judge at major international conferences such as KubeCon, and repeated invitations to speak and lead technical initiatives collectively demonstrate recognition by the global cloud-native community. These recognitions are not self-generated or internal but arise from independent, peer-reviewed, and highly selective processes, confirming that his work is acknowledged by recognized experts worldwide.

Third, and most importantly, Mr. Knabben's record demonstrates that his contributions place him among the **small percentage at the very top of the field**. His authorship and leadership of the Windows Operational Readiness project established the first standardized framework for validating Windows Kubernetes clusters, a contribution adopted by major cloud providers such as Amazon Web Services, Microsoft Azure, and Google Cloud. In parallel, his architectural work at Loadsmart transformed a multi-billion-dollar logistics segment, achieving measurable operational improvements and adoption by industry leaders such as Maersk and Ports America. These are not routine engineering tasks but foundational contributions that have reshaped industry practices and are relied upon at scale across global infrastructure systems.

Finally, the totality of the evidence demonstrates that Mr. Knabben's influence extends beyond individual projects to the broader advancement of the field itself. Through his leadership roles at Broadcom and within the Linux Foundation/CNCF ecosystem, his judging activities, authorship, and community leadership, he actively shapes standards, best practices, and the future direction of cloud-native and AI-ready infrastructure. His work impacts millions of developers and thousands of enterprises worldwide, reinforcing that his contributions are both influential and widely disseminated.

For these reasons, when evaluating the petition in its entirety under the final merits determination framework, the evidence clearly establishes that Mr. Knabben has achieved sustained national and international acclaim and is among the small percentage of individuals who have risen to the very top of the field. Therefore, he fully satisfies the requirements for classification as an individual of extraordinary ability under INA § 203(b)(1)(A).

To assist the adjudicator in making the final determination on Mr. Knabben's case, we submit other relevant evidence for the sustained acclaim of his work that does not apply to any regulatory criteria under **Exhibit K**:

K.1. Mr. Knabben's passport and visa.
K.2. Mr. Knabben's birth certificate
K.3. Academic records, including diplomas and transcripts.
K.4. Other Courses participation applied to Mr. Knabben's field.
K.5. Mr. Knabben's certifications.

In sum, the breadth of the evidence unequivocally establishes that Mr. Knabben meets the burden of proof for classification as an alien of extraordinary ability under INA §203(b)(1)(A). His consistent record of high-level contributions to technology affirms, by a preponderance of evidence, that he is at the forefront of his profession and whose continuous presence in the United States will be invaluable.

Conclusion and Request for Favorable Adjudication

In conclusion, Mr. Knabben high-level achievements and consistent contributions to his field demonstrate that he meets the standard required for the EB-1A visa classification. His work has left a significant and lasting impact in the STEM community, narrowly Cloud-Native Infrastructure and Kubernetes, as evidenced by the several accolades and widespread recognition his projects have received.

In the aggregate, this evidentiary record confirms Mr. Knabben extraordinary ability and his eligibility under INA 203(b)(1)(A). The evidentiary portfolio demonstrates that he meets far beyond the minimum eligibility criteria and in accordance with *Kazarian v. USCIS*, he belongs to the small percentage of professionals who have risen to the very top of his field.

We trust that by the preponderance of the evidence, the documents presented herein are sufficient to warrant a favorable decision on the request. In totality, Mr. Knabben has proven his eligibility for classification as a person with extraordinary ability in technology.

Granting Mr. Knabben an immigrant visa will enable him to continue making valuable contributions in his field in the United States. We are confident that his extraordinary abilities will continue to benefit this nation. We kindly request that you consider his application favorably and grant him the opportunity to further his outstanding career in the United States.

Thus, for all the reasons set forth in this letter, we respectfully request that the USCIS grant AMIM MOISES SALUM KNABBEN request for the EB-1A Visa.

Your attention to this case will be deeply appreciated. Thank you for your time and consideration of the request on behalf of this application.

Sincerely,

Otavio Haverroth Silva
California Bar # 343486

Exhibit list

Exhibits:	Pages:
Exhibit A. Evidence that petitioner will continue working and contributing to the area of Extraordinary Ability	
A.1. Mr. Knabben’s Personal Statement	1-5
A.2. Mr. Knabben’s Resume	6-18
A.3. Mr. Knabben’s academic diplomas and transcripts	19-36
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Exhibit B. Receipt of lesser nationally or internationally recognized prizes or awards for excellence	
B.1. Official publication from the Kubernetes Contributors website listing the 2021 Contributor Award recipients, confirming that Mr. Amim Knabben was a recipient of the award, including the nomination rationale for his contributions to the Kubernetes project	50-52
B.2. Photograph evidence of the official CNCF/Kubernetes Contributor Award plaque issued to Mr. Amim Knabben, expressly identifying him as a recipient of the award and describing the recognized contributions for which the honor was conferred	53
B.3. Letter from Jay Vyas, Broadcom SIG Windows Emeritus Tech-Lead, dated Dec. 4, 2025, confirming that Mr. Knabben was the recipient of the 2021 SIG Windows Kubernetes Contributor Award	54-61
B.4. Official CNCF/Kubernetes Contributors Awards Ceremony Playbook describing the structured, merit-based selection process for Contributor Awards, including peer nomination, evaluation of substantive technical contributions, and limited number of	62-65

recipients per Special Interest Group, demonstrating that such awards constitute internationally recognized honors for excellence within the global Kubernetes community

B.5. Official publication from the Cloud Native Computing Foundation (CNCF) announcing the 2025 Community Awards, describing the recognition of outstanding contributors across a global ecosystem of hundreds of thousands of participants and organizations, thereby demonstrating that such awards constitute internationally recognized honors for excellence in the cloud native technology field 66-74

Exhibit C. Membership in associations in the field for which classification is sought that require outstanding achievements of their members, as judged by recognized national or international experts in their disciplines or field

C.1. Printout from the official Cloud Native Computing Foundation (CNCF) website verifying that Mr. Knabben is listed as a current CNCF Ambassador and the criteria for the recognition, confirming his active status within the CNCF Ambassador program and that it requires outstanding achievements of its members as judged by experts 75

C.2. Printout of the official CNCF Ambassador credential issued by The Linux Foundation confirming that Mr. Knabben was selected as a CNCF Ambassador for Spring 2023, and that the selection requires outstanding achievements of its members as judged by experts 76-77

C.3. Support letter from Audra Montenegro, Community Outreach Manager, Cloud Native Computing Foundation (CNCF), dated January 21, 2026, confirming Mr. Knabben’s membership as a CNCF Ambassador and that the selection was evaluated by experts based on his outstanding achievements 78-83

C.4. Support letter from ricardo pchevuzinske katz, Principal Software Engineer, Kubernetes member 84-87

and maintainer, SIG Network contributor, confirming Mr. Knabben membership within the Kubernetes Organization and that the requirements for membership are outstanding achievements as judged by experts

C.5. Verified Golden Kuberstronaut badge of Mr. Knabben, demonstrating that he holds this recognition permanently 88-90

C.6. Printout from the official CNCF website showing Mr. Knabben standing as a Golden Kuberstronaut, demonstrating that he holds this recognition permanently 91-92

C.7. Official publication from CNCF describing the Kubestronaut and Golden Kubestronaut programs, outlining the stringent earning criteria requiring successful completion of all Kubernetes and cloud native certifications and maintenance of active credentials, thereby demonstrating advanced, multi-domain expertise and outstanding achievements in the field 93-99

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D.1. Online article Amusement Parks and Shipping Ports: CNCF Ambassadors Tell All, May 24, 2023, vmware by Broadcom website, authored by Suzanne Ambiel, (https://blogs.vmware.com/opensource/2023/05/24/amusement-parks-and-shipping-ports-cncf-ambassadors-tell-all), demonstrating that the published material is related to Mr. Knabben and his work in Cloud-Native technology 100-105

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D.3. Online article SIG Node CI Subproject Celebrates Two Years of Test Improvements, 112-115

February 16, 2022, Kubernetes Blog, authored by Sergey Kanzhelev and Elana Hashman (https://kubernetes.io/blog/2022/02/16/sig-node-ci-subproject-celebrates), demonstrating that the published material is related to Mr. Knabben and his work in Cloud-Native technology

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E.3. Badges earned by Mr. Knabben including as a committee member, track chair, program committee, and organizer, demonstrating that he was selected as a co-chair to judge the work of others in technology in several events and conferences 120-126

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F.3. Kubernetes project, Validating the Windows Cluster Operability (WOR Description) demonstrating originality of the WOR project, proving its existence as a specialized, structured test suite within the official Kubernetes project 137

F.4. GitHub, Contributors List for kubernetes-sigs/windows-operational-readiness demonstrating originality showing Mr. Knabben as the top contributor and developer of the project's codebase 138

F.5. Edward Summers, Letter of Support for Amim Moises Salum Knabben (Jan. 25, 2026). Demonstrating both originality and major significance of the "Smart Drayage" free-flow model and its significant impact 139-145

F.6. Wall Street Journal, Maersk Invests in Freight-Booking Startup Loadsmart (news article) demonstrating major significance and validating the industry-wide recognition of the technology Mr. Knabben developed for Loadsmart and its importance to global shipping leaders 146-172

F.7. Thiago Finardi, Letter of Support for Amim Moises Salum Knabben (Dec. 5, 2025). Demonstrating both originality and major significance, confirming Mr. Knabben as the original founder of the KCG SC community and lead organizer of the first-ever KCD in Southern Brazil 173-183

F.8. CNCF, KCD Floripa Brasil 2024 (December) Issue #558 (GitHub project approval). documenting the formal proposal and approval process led by Mr. Knabben to create the first community conference in the region, demonstrating its originality 184-191

F.9. CNCF Community Platform, Organization of KCD Floripa 2024 at CNCF KCD Brasil (official website profiles), listing Mr. Knabben as "Organizer 1" and Program Manager, confirming his central role in developing the event's technical content 192

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G.1. Kubernetes Blog article, Defining Network Policy Conformance for Container Network Interface (CNI) Providers, authored by Matt Fenwick, Jay Vyas, Ricardo Katz, Amim Knabben, Douglas Schilling Landgraf, and Christopher Tomkins (Apr. 20, 2021), available at Kubernetes.io, demonstrating that Mr. Knabben is a named co-author of a technical publication in his field 195-202

G.2. Kubernetes Blog article, Introducing the Windows Operational Readiness Specification, authored by Jay Vyas, Amim Knabben, and Tatenda Zifudzi (Apr. 3, 2024), available at Kubernetes.io, demonstrating that Mr. Knabben is a named co-author of a technical publication in his field 203-205

G.3. Kubernetes official documentation, Submitting Articles to Kubernetes Blogs, describing the structured editorial and review process, including assignment of a blog editor, peer “writing buddy” review, and final approval prior to publication, demonstrating that submitted works undergo expert review and approval, thereby qualifying as scholarly publications within the meaning of USCIS guidance 206-210

G.4. Third-party confirmation, Top Kubernetes Blogs to Follow for Expert Insights (Kubegrade), identifying the Kubernetes.io Blog as the official Kubernetes publication and a primary source of information for 211-212

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I.2. Letter from Jay Vyas, Staff Software Engineer at Tesla and former Staff Software Engineer at Broadcom, confirming Mr. Knabben’s critical and leading role as Windows Technical Lead and Node 228-235

Technical Lead for the Tanzu Kubernetes Grid platform

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I.4. Letter from Ellen Perito Körbes, Senior Product Manager, detailing Mr. Knabben's role as Security Technical Lead for Tanzu Kubernetes Grid, including his authority over security architecture, leadership of compliance initiatives for federal and enterprise customers, and contributions to product commercialization and market expansion 242-245

I.5. Tanzu R&D Engineering Top Performer Achievement Award issued by Broadcom Inc., formally recognizing Mr. Knabben's outstanding technical leadership, performance, and critical contributions to the organization's engineering objectives 246

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I.7. Documentation of the Tanzu Kubernetes Grid (TKG) product and its security and compliance framework, including architecture materials and detailed STIG (Security Technical Implementation Guide) results and hardening configurations, submitted to demonstrate that Mr. Knabben, as Security Technical Lead, was responsible for architecting and implementing critical security solutions for Kubernetes infrastructure used by high-level federal and enterprise customers, including U.S. government agencies requiring strict CIS and STIG compliance. 248-270

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Exhibit A. Evidence that petitioner will continue working and contributing to the area of Extraordinary Ability

Self-Statement - Amim Knabben

I am writing to present my qualifications and to demonstrate how my extraordinary expertise in cloud-native infrastructure, Kubernetes orchestration, and artificial intelligence platforms directly supports the critical national interests of the United States, aligning with the Executive Order on Safe AI (October 2023) and the National Cybersecurity Strategy (March 2023).

About my professional background

My 20-year career has strategically evolved from enterprise infrastructure foundations (2004-2015) in Brazilian government organizations to internationally recognized technical leadership. During the transition to cloud computing (2015-2017), I developed a high-performance API at Axado that contributed to the startup's acquisition by Mercado Livre for USD 8M. At Loadsmart (NYC), I architected the Port Drayage system, which drove 300% year-over-year growth and secured a USD 19M investment from PortsAmerica/Maersk, strengthening the infrastructure of seven ports along the U.S. East Coast.

Between 2018 and 2020, I established myself in the Kubernetes ecosystem with recognized contributions, earning all three CNCF certifications (CKA, CKAD, CKS) and becoming a member of the Kubernetes organization. At VMware (2021-2023), I pioneered security automation for Tanzu Kubernetes Grid, achieving 75-80% compliance with CIS benchmarks and STIG test validations, in addition to automating the detection and monitoring of CVEs across more than 100 internal components, enabling companies and agencies to deploy more secure Kubernetes infrastructure. I also contributed to the development of hybrid Windows/Linux support within the product.

Currently at Broadcom (2023-present), as Principal Software Engineer and Group Tech Lead, I lead the technical strategy for Tanzu Kubernetes Grid (millions in ARR), guiding 30+ engineers across five specialized teams and collaborating directly with Engineering and Product Directors to align the roadmap with workload deployment requirements for AI utilization, zero-trust architecture, and federal and commercial standards compliance.

Achievements and International Recognition

I was recognized with the Broadcom Top Performer Award (2024) for technical leadership during the VMware-Broadcom transition, delivering two critical releases with only 15% of the original team size, and with the Kubernetes Contributor Award (2021), granted by the CNCF, for enhancing the Windows developer experience in Kubernetes, facilitating enterprise adoption of cloud-native technologies. As a CNCF Ambassador (one of approximately 300 worldwide) and Emeritus Kubernetes SIG-Windows Tech Lead (2023-2024), I directed technical strategy, collaborating with engineers from Microsoft, Red Hat, and VMware, and served as KubeCon Track Chair & Program Committee member for the Cloud Native Computing Foundation, reviewing 100+ technical proposals and shaping conferences with over 10,000 participants.

Continuity and Future Plans in the United States

Upon establishing myself in the United States, my immediate priorities include accelerating research and development in security, reliability, and scalability for high-demand critical system platforms, incorporating security-by-design standards and best practices for cloud-native distributed system architecture. Develop systems for next-generation computational clusters with federal and commercial compliance automation, enabling government agencies and enterprises to deploy reliable AI infrastructure meeting DISA STIG, DoD, and CIS requirements. Lead the architectural development of secure multi-tenant Kubernetes workloads utilizing GPUs and hybrid multi-operating system modes. Focus on continuing active contributions to cloud-native and open-source projects, and maintain an engaged and participatory presence in local and federal open-source communities.

In the long term, I intend to establish training programs to educate American engineers and operators in critical infrastructure skills, AI security, and cloud-native system architecture, addressing gaps identified by U.S. government and industry leaders. I will work directly with the CNCF through Working Groups and Technical Advisory Groups, and collaborate with NIST, CIS, and other industry standards bodies, defining best practices for AI infrastructure in government and corporate environments, ensuring that these standards consistently reflect American priorities of security, transparency, and interoperability.

Conclusion

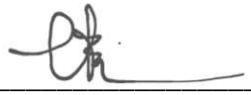
My work will enable the secure deployment of AI, strengthen the protection of critical enterprise infrastructure, and preserve American influence over international technology standards. The combination of my technical leadership at a major U.S. technology company (Broadcom), recognition by the global Kubernetes community, and established relationships with U.S.-based technology leaders positions me to make sustained and meaningful contributions to the national interests of the United States.

I am committed to continuing this work with the focus, excellence, and perseverance that have characterized my career. The United States will benefit from my ongoing contributions to secure and reliable AI infrastructure, which will drive American innovation for decades to come.

October 27, 2025

Amim Moises Salum Knabben
Principal Software Engineer, Broadcom Inc.
CNCF Ambassador
Emeritus Kubernetes SIG-Windows Tech Lead

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: January 26, 2026.

Self Statement - Amim Knabben

Escrevo para apresentar minhas qualificações e demonstrar como minha habilidade extraordinária em infraestrutura cloud-native, orquestração com Kubernetes e plataformas de inteligência artificial apoia diretamente os interesses nacionais críticos dos Estados Unidos, alinhando-se à Ordem Executiva sobre IA Segura (outubro/2023) e à Estratégia Nacional de Cibersegurança (março/2023).

Sobre a minha trajetória profissional

Minha carreira de 20 anos evoluiu estrategicamente desde a fundação em infraestrutura empresarial (2004-2015) em organizações governamentais brasileiras até a liderança técnica internacional reconhecida. Na transição para cloud computing (2015-2017), desenvolvi na Axado uma API de alta performance que contribuiu para a aquisição da startup por USD 8M pelo Mercado Livre. Na Loadsmart (NYC), arquitetei o sistema Port Drayage, que impulsionou o crescimento de 300% ano a ano e o investimento de USD 19M da PortsAmerica/Maersk, fortalecendo a infraestrutura de sete portos da Costa Leste dos EUA.

Entre 2018 e 2020, estabeleci-me no ecossistema do Kubernetes, com contribuições reconhecidas, conquistando as três certificações da CNCF (CKA, CKAD, CKS) e tornando-me membro da organização Kubernetes. Na VMware (2021-2023), pioneirei a automação de segurança para o Tanzu Kubernetes Grid, alcançando 75-80% de conformidade com o CIS e validações de testes STIG, além de automatizar a detecção e o monitoramento de CVEs em mais de 100 componentes internos, habilitando empresas e agências a implantar infraestrutura de Kubernetes mais segura. Além do desenvolvimento de suporte híbrido Windows/Linux no produto.

Atualmente na Broadcom (2023-presente), como Principal Software Engineer e Group Tech Lead, lidero a estratégia técnica para Tanzu Kubernetes Grid (millions de ARR), orientando 30+ engenheiros em cinco equipes especializadas e colaborando diretamente com Diretores de Engenharia e Produto para alinhar o roadmap aos requisitos de implantação de cargas de trabalho para utilização IA, arquitetura zero-trust e conformidade de padrões federal e comercial.

Conquistas e Reconhecimento Internacional

Fui reconhecido com o Broadcom Top Performer Award (2024) por liderança técnica durante a transição VMware-Broadcom, entregando dois releases críticos com apenas 15% do tamanho original da equipe, e com o Kubernetes Contributor Award (2021), concedido pela CNCF, por melhorar a experiência de desenvolvedores Windows no Kubernetes, facilitando a adoção empresarial de tecnologias cloud-native. Como CNCF Ambassador (um de ~300 globalmente) e Emeritus Kubernetes SIG-Windows Tech Lead (2023-2024), dirigi a estratégia técnica, colaborando com engenheiros da Microsoft, Red Hat e VMware, além de servir como KubeCon Track Chair & Program Committee da Cloud Native Computing Foundation, avaliando 100+ propostas técnicas e moldando conferências com 10.000+ participantes.

Continuidade e Planos Futuros nos Estados Unidos

Ao me estabelecer nos Estados Unidos, minhas prioridades imediatas incluem acelerar a pesquisa e o desenvolvimento em segurança, confiabilidade e escalabilidade para plataformas de sistemas críticos de alta demanda, incorporando padrões de security-by-design e boas práticas de arquitetura de sistemas distribuídos cloud-native. Desenvolver sistemas para clusteres computacionais de próxima geração com automação de conformidade federal e comercial, permitindo que agências governamentais e empresas implantem infraestrutura de IA confiável atendendo aos requisitos DISA STIG, DoD e CIS. Liderar o desenvolvimento arquitetural de cargas Kubernetes multi-tenancy seguras com utilização de GPUs e modos multi sistemas operacionais híbridos. Focar em continuar ativamente na contribuição para projetos cloud-native e open source, e manter uma postura ativa e participativa nas comunidades open source locais e federais.

No longo prazo, pretendo estabelecer um programas de treinamento para formar engenheiros e operadores americanos em habilidades críticas de infraestrutura, segurança em IA e arquitetura de sistemas cloud-native, abordando as lacunas identificada por líderes governamentais e da indústria dos EUA. Trabalharei diretamente com a CNCF por meio de Working Groups e Technical Advisory Groups, além de colaborar com a NIST, CIS e outros órgãos de padrões da indústria, definindo melhores práticas de infraestrutura para IA nos ambientes governamental e corporativo, garantindo que esses padrões reflitam sempre a prioridades americanas de segurança, transparência e interoperabilidade.

Conclusão

Meu trabalho irá habilitar a implantação segura de IA, fortalecer a proteção de infraestrutura crítica empresarial, e preservar a influência americana sobre padrões tecnológicos internacionais. A combinação de minha liderança técnica em uma grande empresa de tecnologia dos EUA (Broadcom), reconhecimento pela comunidade global do Kubernetes e relacionamentos estabelecidos com líderes tecnológicos baseados nos EUA me posicionou para fazer contribuições sustentadas e significativas aos interesses nacionais americanos.

Estou comprometido em continuar este trabalho com o foco, a excelência e a perseverança que caracterizaram minha carreira. Os Estados Unidos se beneficiarão de minhas contribuições contínuas para a infraestrutura de IA segura e confiável, que alimentará a inovação americana por décadas.

27 de Outubro de 2025

Amim Moises Salum Knabben
Engenheiro de Software Principal, Broadcom Inc.
Embaixador CNCF
Emeritus Kubernetes SIG-Windows Tech Lead

AMIM MOSES

SALUM KNABBEN

Email: |
amim.knabben@gmail.com
Phone | 48 996638106

I am an award-winning Principal Software Engineer and global technology leader recognized for my extraordinary skills in cloud-native infrastructure, currently serving as Group Tech Lead for the Tanzu Kubernetes Grid product line at Broadcom and managing cross-functional teams of more than 30 engineers across five internal specialized areas. As one of the seven CNCF *(Cloud Native Computing Foundation*) Ambassadors in Brazil and Emeritus SIG Windows Tech Lead for the Kubernetes project, I directly influenced critical infrastructure used by 54% of Fortune 500 companies and 5.6 million developers worldwide in 2023. My leadership helped transform an internal logistics platform at an American startup into a 300% year-over-year growth engine, securing $19M as well as strategic investments from PortsAmerica and Maersk. I evaluated and shaped the direction of the largest Kubernetes events across three continents as a Program Committee member for three years (with more than 10,000 participants at each edition), while founding and scaling a local technical community from scratch to more than 900 members today.

WORK EXPERIENCE

PRINCIPAL SOFTWARE ENGINEER
Broadcom Inc. | Remote – San Jose, California, USA
12/2023 – PRESENT
Led the technical strategy and execution of Tanzu Kubernetes Grid as Group Tech Lead, overseeing a multi-million-dollar annual revenue product line while providing technical guidance to a cross-functional team of more than 30 engineers across five specialized product areas.

Collaborated directly with the Director of Engineering and the Senior Director of Product to build and design product roadmaps and planning based on both technical specifications and rapidly evolving customer requirements, ensuring alignment between engineering capabilities and market demands.

SENIOR MEMBER OF TECHNICAL STAFF
VMware LLC | Remote – Palo Alto, California, USA
09/2021 – 11/2023
Designed and built critical infrastructure systems and automated deployment pipelines that enabled hybrid operating system capabilities using ClusterAPI, directly supporting VMware's enterprise Kubernetes offerings. Served as Tech Lead for the node management team, specializing in Windows nodes and contributing directly to the Kubernetes project.

Led the implementation of security policies and compliance controls at both the operating system and Kubernetes levels for the Standalone Tanzu Kubernetes Grid product line, maintaining enterprise-grade security standards required for production deployment.

SENIOR SOFTWARE ENGINEER

Loadsmart | New York City, NY, USA

03/2017 – 08/2021

Served as a core technical contributor responsible for the development and maintenance of the company's comprehensive logistics platform. Played a critical role in developing and maintaining multiple web-based products, including a Fleet Management Solution, Vehicle Asset Tracking Server, Dynamic Pricing Engine for the logistics marketplace, Shipment Booking System, and Shipment Management System.

As an individual contributor, led the development and architecture of the company's Port Drayage service offering through a strategic internal TMS integration, contributing to 300% year-over-year revenue growth with expansion into seven major U.S. East Coast ports and securing a direct $19M investment from PortsAmerica and Maersk following the project's completion.

SENIOR SOFTWARE ENGINEER

Axado | Florianópolis, Santa Catarina, Brazil

10/2015 – 08/2017

As a software engineer, I was part of the team responsible for developing and delivering a high-performance shipping rate API service with throughput of approximately 10k requests per minute, enabling real-time pricing for major Brazilian e-commerce platforms. I successfully contributed to the company's growth, which resulted in an $8M acquisition by Mercado Livre, the leading e-commerce platform in Latin America.

I was responsible for the development and maintenance of software programs and packages for freight calculation, delivering low-latency results through a REST API using Django and PostgreSQL. I actively participated in weekly meetings with management, engineering, and technical teams, iterating in weekly sprints using agile and lean development practices, including documentation and user training on existing software.

I developed and maintained an Elasticsearch cluster on Amazon Web Services, with real traffic replicated through an ETL job using Logstash, and created and maintained a Kubernetes cluster, migrating secondary services from virtualized Amazon EC2 instances.

SENIOR SOFTWARE ENGINEER

Byne | Florianópolis, Santa Catarina, Brazil

03/2012 – 08/2015

As a software engineer, I was responsible for the research, development, design, and planning of a unified communications system successfully deployed in major airports and oil refineries in Brazil. I performed audio hardware integration with third-party vendors, including Bluetooth headsets and USB speakers, and integrated the core system with programmable logic controllers for industrial automation through the Altus Modbus interface.

Additionally, I was responsible for integrating the Kenwood radio repeater system using Python, Asterisk, and external USB vocoders. Responsible for automated testing (QA) of the project using a Behavior-Driven Development (BDD) setup to validate required functional requirements in real time.

SENIOR SOFTWARE ENGINEER
OpenS | Florianópolis, Santa Catarina, Brazil
10/2010 – 02/2012
Responsible for the development, upgrade, and maintenance of computer programs and software packages to manage Voice over IP, using a PHP front-end system with the Zend framework, as well as the Asterisk PBX software. Developed and integrated a power dialer that enabled company clients to create and regularly integrate call campaigns.

Served as Technical Lead for Project Cauã, responsible for the configuration, management, and customization of an open-source home entertainment system using Debian GNU/Linux and Kodi, enabling high-definition video and surround sound through dedicated hardware.

SENIOR SOFTWARE ENGINEER
DataInfo | Florianópolis, Santa Catarina, Brazil
03/2010 – 05/2011
As Systems and Network Administrator at the State Health Department, I was responsible for the planning, design, and maintenance of the network for the headquarters building, state hospitals, and medication warehouses in Florianópolis. Installed Rack and Tower servers with RAID 0, 1, and 3 hardware and software configurations, and set up network equipment including Layer 2/3 switches, Wi-Fi access points, fiber LAN routers, and general-purpose Layer 3 gateways.
Led the migration of deprecated bare-metal servers to virtual machines using VMware vSphere and EMC2 fiber storage, and configured a Network Operations Center (NOC) responsible for monitoring over 500 devices via SNMP and ICMP protocols using FreeBSD, Net-SNMP, Nagios, and Cacti. Implemented and customized firewall and internal network intrusion detection systems to detect malware, ensuring infrastructure security.

EDUCATION

MASTER'S IN STRATEGIC MANAGEMENT OF SOFTWARE ENGINEERING
European University of the Atlantic
Santander, Cantabria, Spain (Remote)
Dec 2021 – Jun 2023
Master's Thesis – Cloud-Native Architecture: Infrastructure and Application Strategies (Grade 10)

GRADUATE STUDIES DEGREE IN CLOUD COMPUTING
Senac University Center (Remote)
São Paulo, São Paulo, Brazil
Aug 2020 – Jun 2022
Capstone Project – Machine Learning Operations with Kubeflow in Cloud-Native Infrastructure (Grade 8.5)

POST GRADUATE PROGRAM IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING: BUSINESS APPLICATIONS
The University of Texas Austin,
Austin, TX, USA (Remote)
Oct 2020 – Jun 2021

TECHNICIAN IN FINANCIAL MANAGEMENT
University of Southern Santa Catarina,
Florianópolis, Santa Catarina, Brazil
Dec 2018 – Feb 2019

KEY COURSES / SEMINARS

SPEAKER AT EVENT

- **GOPHERCON BRAZIL 2025 – SPEAKER**
  - BEHIND THE KUBERNETES TESTING SUITE
- **GOPHERCON BRAZIL 2024 – SPEAKER**
  - *MITIGATING GOLANG APPLICATION CVES IN PRODUCTION*
- **GOPHERCON BRAZIL 2023 – SPEAKER**
  - USING GRPC COMMUNICATION IN SERVICE MESH ENVIRONMENTS
- **KUBECON + CLOUDNATIVECON CONTRIBUTOR SUMMIT NORTH AMERICA 2023 – SPEAKER**
  - ESTABLISHING CAPI CLUSTERS IN COMPLIANCE WITH CIS BENCHMARKS
- **gRPC CONF 2023 – SPEAKER**
  - THE SECURITY EVOLUTION OF GRPC SERVICES IN THE MESH
- **KUBECON + CLOUDNATIVECON CONTRIBUTOR SUMMIT NORTH AMERICA 2022 - SPEAKER**
  - SIG WINDOWS DEVELOPMENT ENVIRONMENT
- **KUBECON + CLOUDNATIVECON NORTH AMERICA 2022 - SPEAKER - 2**
  - THE WINDOWS OPERATIONAL READINESS SPECIFICATION
  - WHAT'S NEW ON SIG-WINDOWS
- **CONFLOSS - 2024 - SPEAKER**
  - UNRAVELING THE KUBERNETES API SERVER: FLOW, AUTHENTICATION, AND EXTENSIONS
- **CHATLOOPBACKOFF - CNCF OFFICIAL SHOW - EPISODE 23 (SCORE)**
- **CHATLOOPBACKOFF - CNCF OFFICIAL SHOW - EPISODE 18 (PORTER)**
- **DEVOPS STAGE 2023**
  - SERVICE MESH WITHOUT SIDECARS ON ISTIO
- ***IstioCon - Oct 2023***
  - THE SECURITY EVOLUTION OF GRPC SERVICE IN THE MESH
- ***Solo.io (4.48k subscribers, 498 views)- Jul 2023***
  - HOW DOES ISTIO AMBIENT MESH WORK?
- ***CalicoCon + Cloud-Native Security Summit - Dec 2022***
  - HYBRID OS CLUSTERS WITH CALICO
- ***Antrea Live - Ep 20 - Mar 2022***
- ***Antrea Live - Ep 17 - Feb 2022***
- ***Antrea Live - Ep 16 - Feb 2022***
- ***Antrea Live - Ep 12 - Jan 2022***
- ***Antrea Live - Ep 11 - Jan 2022***
- ***TGI Kubernetes Episode 162: CNI code surfing - Jul 2021***

ATTENDEE:

- **KUBECON + CLOUDNATIVECON EUROPE 2025 - ATTENDEE**
- **KubeCon + CloudNativeCon North America 2023 - Attendee**
- **KUBECON + CLOUDNATIVECON EUROPE MAINTAINER SUMMIT 2025 - ATTENDEE**

CERTIFICATIONS

- **Certified Kubernetes Application Developer -** Linux Foundation
- **Certified Kubernetes Administrator -** Linux Foundation
- **Certified Kubernetes Security Specialist -** Linux Foundation
- **AWS Certified Solutions Architect – Associate -** Amazon Web Services (AWS)
- **LPIC-2 Certification -** Linux Professional Institute (LPI)
- **VMware Certified Technical Associate - Application Modernization 2022 -** Broadcom
- **VMware Certified Technical Associate - Data Center Virtualization 2022 -** Broadcom
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- **CCA: Cilium Certified Associate -** The Linux Foundation
- **CGOA: Certified GitOps Associate -** The Linux Foundation
- **CNPA: Certified Cloud Native Platform Engineering Associate** - The Linux Foundation
- **KCA: Kyverno Certified Associate -** The Linux Foundation
- **KCNA: Kubernetes and Cloud Native Associate -** The Linux Foundation
- **KCSA: Kubernetes and Cloud Native Security Associate -** The Linux Foundation
- **PCA: Prometheus Certified Associate -** The Linux Foundation
- **Certified Calico Operator - AWS Expert -** Tigera
- **Certified Hyperledger Sawtooth Administrator -** Linux Foundation
- **Full Stack Web Developer Engineer** - Udacity
- **Data Structures & Algorithms** - Udacity
- **Introduction to Discrete Mathematics for Computer Science** - UC San Diego

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AWARDS

- **BROADCOM INC – TANZU R&D ENGINEERING TOP PERFORMER ACHIEVEMENT AWARD**
  Palo Alto, CA, USA
  2024

- **SIG WINDOWS CONTRIBUTOR AWARD 2021 - KUBECON**
  Los Angeles, CA, USA
  2021

HONORS

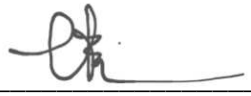
- **CNCF AMBASSADOR - H1 2024 - 2026 -** The Linux Foundation
  - San Francisco, CA, USA:
  - 7 Brazilians in this batch

- **CNCF Ambassador - Spring 2023 - The Linux Foundation**
  - San Francisco, CA, USA
  - Issued Mar 2023 · Expired Mar 2024
  - 4 brazilian ambassadors
  - Selected by technical leadership for advancing critical cloud-native technologies for AI infrastructure and enterprise modernization, representing the CNCF at international events.

VOLUNTEER WORK

- **2024 Cloud Native Community Group**
  The Linux Foundation
  Organizer, Founder
- **Kubernetes Member**
  Cloud Native Computing Foundation
- **Kubernetes SIG Windows**
  Tech Lead
- **Organizer: KCD Floripa 2024**
  The Linux Foundation
- **Organizer: KCD São Paulo 2024**
  The Linux Foundation
- **Program Committee Member: KubeCon + CloudNativeCon India 2024**
  The Linux Foundation
- **Istio day NA 2024 program Committee Member**
  The Linux Foundation
- **Program Committee Member: KubeCon + CloudNativeCon North America 2024**
  The Linux Foundation
- **Program Committee Member: KubeCon + CloudNativeCon Europe 2024**
  The Linux Foundation
- **Program Committee Member: KubeCon + CloudNativeCon North America 2023**
  The Linux Foundation
- **Track Chair: KubeCon + CloudNativeCon North America 2023**
  The Linux Foundation

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: February 18, 2026.

AMIM MOISES

SALUM KNABBEN

E-mail | amim.knabben@gmail.com
Telefone |48 996638106

Eu sou Engenheiro de Software Principal premiado e líder tecnológico global reconhecido pelas minhas habilidades extraordinárias em infraestrutura cloud-native, atualmente servindo como Group Tech Lead para a linha de produtos Tanzu Kubernetes Grid da Broadcom e gerenciando equipes multifuncionais de mais de 30 engenheiros em cinco áreas especializadas internas. Como um dos sete Embaixadores CNCF no Brasil e Emeritus SIG Windows Tech Lead para o projeto Kubernetes, influenciei diretamente a infraestrutura crítica usada por 54% das empresas Fortune 500 e 5,6 milhões de desenvolvedores em todo o mundo em 2023. Minha liderança ajudou a transformar uma plataforma interna de logística de uma startup americana em um motor de crescimento de 300% ano a ano, garantindo $19M, assim como investimentos estratégicos da PortsAmerica e da Maersk. Avaliei e moldei a direção dos maiores eventos de Kubernetes em 3 continentes como membro do Comitê de Programa por três anos (com mais de 10.000 participantes em cada edição), enquanto fundava e escalava uma comunidade técnica local do zero para mais de 900 membros atualmente.

EXPERIÊNCIA

PRINCIPAL SOFTWARE ENGINEER
Broadcom Inc. | Remote - San Jose, California, EUA
12/2023 – PRESENTE
Liderei a estratégia técnica e a execução do Tanzu Kubernetes Grid como Group Tech Lead, supervisionando uma linha de produtos com receita anual milionária enquanto fornecia orientação técnica para uma equipe multifuncional de mais de 30 engenheiros em cinco áreas de produto especializadas.

Colaborei diretamente com o Diretor de Engenharia e o Diretor Sênior de Produto para construir e projetar os roadmaps e o planejamento de produto baseados tanto em especificações técnicas quanto em requisitos de clientes com rápida evolução, garantindo alinhamento entre as capacidades de engenharia e as demandas do mercado.

SENIOR MEMBER OF TECHNICAL STAFF
VMWare LLC | Remote - Palo Alto, California, EUA
09/2021 – 11/2023
Projetei e construí sistemas de infraestrutura crítica e pipelines de implantação automatizados que habilitaram capacidades de sistemas operacionais híbridos usando ClusterAPI, suportando diretamente as ofertas Kubernetes empresariais da VMware. Servindo como Tech Lead para o time de gestão de nós, com especialização em nós Windows e contribuição direta para o projeto Kubernetes.

Liderei a implementação de políticas de segurança e controles de conformidade tanto no nível do sistema operacional quanto no do Kubernetes para a linha de produtos Standalone Tanzu Kubernetes Grid, mantendo padrões de segurança de nível empresarial exigidos para implantação em produção.

SENIOR SOFTWARE ENGINEER
Loadsmart | New York City, NY, EUA
03/2017 – 08/2021
Atuei como contribuidor técnico central responsável pelo desenvolvimento e manutenção da plataforma logística abrangente da empresa. Desempenhei papel crítico no desenvolvimento e manutenção de múltiplos produtos baseados na web, incluindo Solução de Gerenciamento de Frotas, Servidor de Rastreamento de Ativos Veiculares, Motor de Precificação Dinâmica para Mercado Logístico, Sistema de Reserva de Remessas e Sistema de Gerenciamento de Remessas.
Como contribuidor individual, liderei o desenvolvimento e arquitetura da oferta de serviço de Port Drayage da empresa através de uma integração estratégica interna de TMS, contribuindo para um crescimento de receita de 300% ano após ano com a expansão em sete grandes portos da Costa Leste dos EUA e um investimento direto de $19M da PortsAmerica e Maersk após a conclusão do projeto.

SENIOR SOFTWARE ENGINEER
Axado | Florianópolis, SC, Brasil
10/2015 – 08/2017
Como engenheiro de software, fiz parte da equipe responsável por desenvolver e entregar um serviço de API de cotação de frete de alta performance com throughput de ~10k requisições por minuto, possibilitando precificação em tempo real para as principais plataformas de e-commerce brasileiras. Contribuí com sucesso para o crescimento da empresa, que resultou em uma aquisição de $8M pelo Mercado Livre, a principal plataforma de e-commerce da América Latina.
Fui responsável pelo desenvolvimento e manutenção de programas e pacotes de software para cálculo de frete, fornecendo resultados com baixa latência através de uma API REST utilizando Django e PostgreSQL. Participei ativamente de reuniões semanais com equipes gerenciais, de engenharia e técnicas, iterando em sprints semanais utilizando práticas ágeis e lean development, incluindo documentação e treinamento de usuários em software existente.
Desenvolvi e mantive um cluster Elasticsearch na Amazon Web Services, com tráfego real replicado através de um job ETL com Logstash, além de criar e manter um cluster Kubernetes com migração de serviços secundários de máquinas virtualizadas da Amazon EC2.

SENIOR SOFTWARE ENGINEER
Byne | Florianópolis, SC, Brasil
03/2012 – 08/2015
Como engenheiro de software, fui responsável pela pesquisa, desenvolvimento, projeto e planejamento de um sistema de comunicação unificada implantado com sucesso em grandes aeroportos e refinarias de petróleo no Brasil. Realizei a integração de hardware de áudio com fornecedores terceirizados, incluindo fones de ouvido Bluetooth e alto-falantes USB, além de integrar o sistema principal com controladores lógicos programáveis para automação industrial através da interface Altus Modbus.
Adicionalmente, fui responsável pela integração do sistema de repetidores de rádio Kenwood através de Python, Asterisk e external USB vocoders. Responsável pelo teste automatizado (QA) do projeto com um setup de Desenvolvimento de Behavior Driver (BDD) para validação dos requisitos funcionais necessários em tempo real.

SENIOR SOFTWARE ENGINEER
OpenS | Florianópolis, SC, Brasil
10/2010 – 02/2012
Responsável pelo desenvolvimento, upgrade e manutenção de programas de computador e pacotes de software para gerenciar voz sobre IP, utilizando sistema front end em PHP e framework Zend, além do software PBX Asterisk. Desenvolvi e integrei um power dialer que permitia aos clientes da empresa criar campanhas de chamadas e integrá-las de forma regular.

Atuei como líder técnico do Projeto Cauã, responsável pela configuração, gerenciamento e customização de um sistema open source de home entertainment usando Debian GNU/Linux e Kodi, possibilitando vídeo de alta definição e som surround através de hardware.

SENIOR SOFTWARE ENGINEER
DataInfo | Florianópolis, SC, Brasil
03/2010 – 05/2011
Como Administrador de Sistemas e Redes na Secretaria de Estado da Saúde, fui responsável pelo planejamento, design e manutenção da rede do edifício-sede, hospitais estaduais e almoxarifados de medicamentos em Florianópolis. Realizei a instalação de servidores Rack e Tower com hardware e software RAID 0, 1 e 3, configuração e instalação de equipamentos de rede como switches Layer 2/3, Access Points Wi-Fi, roteadores de fibra óptica LAN e gateways de uso geral Layer 3.
Fiz a condução de migração de servidores bare-metal depreciados para máquinas virtuais utilizando VMWare vSphere e storage de fibra EMC2, e configurei um Network Operations Center (NOC) responsável por monitorar mais de 500 dispositivos através dos protocolos SNMP e ICMP usando FreeBSD, Net-SNMP, Nagios e Cacti. Implementei e customizei firewall e sistema de detecção de intrusão de rede interna para detecção de malware, garantindo a segurança da infraestrutura.

EDUCAÇÃO

MESTRADO EM DIREÇÃO ESTRATÉGICA EM ENGENHARIA DE SOFTWARE
Universidad Europea Del Atlántico
Santander, Cantábria, Espanha (Remote)
Dez 2021 - Jun 2023
Thesis –Arquitetura Nativa em Nuvem: Estratégias de Infraestrutura e Aplicações (Nota 10)

PÓS-GRADUAÇÃO EM CLOUD COMPUTING
Centro Universitário Senac (Remote)
São Paulo, SP, Brasil
Ago 2020 - Jun 2022
Thesis – Machine Learning Operations with Kubeflow in Cloud Native Infrastructure (Nota 8.5)

POST GRADUATE PROGRAM IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING: BUSINESS APPLICATIONS
The University of Texas Austin
Austin, TX, USA (Remote)
Out 2020 - Jun 2021

TÉCNOLOGO EM GESTÃO FINANCEIRA
Universidade do Sul de Santa Catarina
Florianópolis, SC, Brasil
Dez 2018 - Fev 2019

PRINCIPAIS CURSOS / SEMINÁRIOS

PALESTRANTE EM EVENTO

- **GOPHERCON BRASIL 2025 - SPEAKER**
  - POR TRÁS DA SUÍTE DE TESTES DO KUBERNETES
- **GOPHERCON BRASIL 2024 - SPEAKER**
  - *MITIGANDO CVES DE APLICAÇÕES GOLANG EM PRODUÇÃO*
- **GOPHERCON BRASIL 2023 - SPEAKER**
  - UTILIZANDO COMUNICAÇÃO GRPC EM AMBIENTES DE SERVICE MESH
- **KUBECON + CLOUDNATIVECON CONTRIBUTOR SUMMIT NORTH AMERICA 2023 - SPEAKER**
  - ESTABLISHING CAPI CLUSTERS IN COMPLIANCE WITH CIS BENCHMARKS
- **GRPC CONF 2023 - SPEAKER**
  - THE SECURITY EVOLUTION OF GRPC SERVICES IN THE MESH
- **KUBECON + CLOUDNATIVECON CONTRIBUTOR SUMMIT NORTH AMERICA 2022 - SPEAKER**
  - SIG WINDOWS DEVELOPMENT ENVIRONMENT
- **KUBECON + CLOUDNATIVECON NORTH AMERICA 2022 - SPEAKER - 2**
  - THE WINDOWS OPERATIONAL READINESS SPECIFICATION
  - WHAT'S NEW ON SIG-WINDOWS
- **CONFLOSS - 2024 - SPEAKER**
  - DESVENDANDO O API SERVER DO KUBERNETES: FLUXO, AUTENTICAÇÃO E EXTENSÕES
- **CHATLOOPBACKOFF - CNCF OFFICIAL SHOW - EPISODE 23 (SCORE)**
- **CHATLOOPBACKOFF - CNCF OFFICIAL SHOW - EPISODE 18 (PORTER)**
- **DEVOPS STAGE 2023**
  - SERVICE MESH WITHOUT SIDECARS ON ISTIO
- ***IstioCon - Oct 2023***
  - THE SECURITY EVOLUTION OF GRPC SERVICE IN THE MESH
- ***Solo.io (4.48k subscribers, 498 views)- Jul 2023***
  - HOW DOES ISTIO AMBIENT MESH WORK?
- ***CalicoCon + Cloud-Native Security Summit - Dec 2022***
  - HYBRID OS CLUSTERS WITH CALICO
- ***Antrea Live - Ep 20 - Mar 2022***
- ***Antrea Live - Ep 17 - Feb 2022***
- ***Antrea Live - Ep 16 - Feb 2022***
- ***Antrea Live - Ep 12 - Jan 2022***
- ***Antrea Live - Ep 11 - Jan 2022***
- ***TGI Kubernetes Episode 162 : CNI code surfing - Jul 2021***

OUVINTE:

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- **KUBECON + CLOUDNATIVECON EUROPE MAINTAINER SUMMIT 2025 - ATTENDEE**

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- **VMware Certified Technical Associate - Data Center Virtualization 2022 -** Broadcom
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- **KCNA: Kubernetes and Cloud Native Associate -** The Linux Foundation
- **KCSA: Kubernetes and Cloud Native Security Associate -** The Linux Foundation
- **PCA: Prometheus Certified Associate -** The Linux Foundation
- **Certified Calico Operator - AWS Expert -** Tigera
- **Certified Hyperledger Sawtooth Administrator -** Linux Foundation
- **Full Stack Web Developer Engineer** - Udacity
- **Data Structures & Algorithms** - Udacity
- **Introduction to Discrete Mathematics for Computer Science** - UC San Diego

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PRÊMIOS

- **BROADCOM INC - TANZU R&D ENGINEERING TOP PERFORMER ACHIEVEMENT AWARD**
  Palo Alto, CA, USA
  2024

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  Los Angeles, CA, USA
  2021

HONRARIAS

- **CNCF Ambassador - H1 2024 - 2026 -** The Linux Foundation
  - San Francisco, CA, USA
  - 7 brasileiros neste batch

- **CNCF Ambassador - Spring 2023 - The Linux Foundation**
  - San Francisco, CA, USA
  - Issued Mar 2023 · Expired Mar 2024
  - 4 brazilian ambassadors
  - Selecionado pela liderança técnica no avanço de tecnologias cloud-native críticas para infraestrutura de IA e modernização empresarial, representando a CNCF em eventos internacionais.

TRABALHO VOLUNTÁRIO

- **2024 Cloud Native Community Group**
  The Linux Foundation
  Organizer, Founder
- **Kubernetes Member**
  Cloud Native Computing Foundation
- **Kubernetes SIG Windows**
  Tech Lead
- **Organizer: KCD Floripa 2024**
  The Linux Foundation
- **Organizer: KCD São Paulo 2024**
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  The Linux Foundation
- **Istio Day NA 2024 Program Committee Member**
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- **Track Chair: KubeCon + CloudNativeCon North America 2023**
  The Linux Foundation

SENAC UNIVERSITY CENTER

Reaccreditation Ordinance MEC *(Ministry of Education)* No. 494, of 04/11/2017 - Federal Official Gazette No. 71, Section 1, page 13 of 04/12/2017

Avenida Eng. Eusébio Stevaux, 823 - Santo Amaro - São Paulo - State of São Paulo - ZIP Code: 04696-000

ACADEMIC TRANSCRIPT

Lato Sensu Graduate Program: **SPECIALIZATION IN CLOUD COMPUTING**

Legal Basis: **CONSUNI *(University Council)* Resolution No. 010/2016, of 09/28/2015, published on 09/28/2015**

Nome: **Amim Moisés Salum Knabben** Student ID: **1142197869**

Birth Date: 05/10/1986 Born in: Santa Catarina Nationality: Brazilian

ID No. 4.821.578/SC

Year	Subjects	Workload	Grade	Status	Professor	Degree
2020	CLOUD APPLICATIONS	32h	9.5	Approved	Vladimir Aparecido Esteves	Master's
2020	CLOUD COMPUTING SOLUTION ARCHITECTURE	32h	9.5	Approved	Adenilson Boccato de Almeida	Master's
2020	FUNDAMENTALS OF CLOUD COMPUTING	40h	9.5	Approved	Adenilson Boccato de Almeida	Master's
2020	CAPSTONE PROJECT I: METHODOLOGY	16h	10	Approved	Dirceu Matheus Junior	Master's
2021	ASSESSMENT OF CLOUD COMPUTING USAGE	32h	8.5	Approved	Monica Mancini	Doctorate
2021	CLOUD SERVICES MANAGEMENT	40h	8.0	Approved	Maria Helena Mauro	Master's
2021	IMPLEMENTATION AND MIGRATION TO CLOUD COMPUTING	24h	9.0	Approved	Vladimir Aparecido Esteves	Master's
2021	INFRASTRUCTURE AND PLATFORM AS A SERVICE	40h	8.5	Approved	Alexandre Lopes Machado	Doctorate
2021	CLOUD COMPUTING SECURITY	32h	9.5	Approved	Monica Mancini	Doctorate
2021	TRENDS AND INNOVATION IN CLOUD COMPUTING	40h	8.5	Approved	Alexandre Lopes Machado	Doctorate
2021	CAPSTONE PROJECT II: DEVELOPMENT	16h	8.5	Approved	Vladimir Aparecido Esteves	Master's
2021	CAPSTONE PROJECT III: COMPLETION	16h	8.5	Approved	Vladimir Aparecido Esteves	Master's

Total program workload:	360h
Total workload completed:	360h

Period of attendance: 08/12/2020 to 11/14/2021

Program Completion Date: 04/07/2022 Certificate Issuance Date: 06/22/2022

Capstone Project Title: Machine learning operations on cloud-native infrastructure
Grade: 8.5

We hereby declare that the aforementioned program complies with all provisions of CNE/CES *(National Education Council / Higher Education Chamber)* Resolution No. 1, of 04/06/2018 - Federal Official Gazette of 04/09/2018.

This document contains no amendments or erasures. All unused spaces are considered void for all purposes.

São Paulo, July 7, 2022

-----//**Signature**//----
Maria Stela Reis Crotti
Director of Student Relations and Services
ID No. 12.367.251-X/SP

FEDERATIVE REPUBLIC OF BRAZIL
ORDER AND PROGRESS

Senac

SENAC UNIVERSITY CENTER

The Director of Graduate and Extension Programs of Senac University Center, in the exercise of his duties and in view of the results achieved, awards this graduate lato sensu certificate - specialization in

Cloud Computing

field of knowledge: information and communication technologies to

Amim Moisés Salum Knabben

Brazilian, born in the State of Santa Catarina, on May tenth, 1986,
ID No. 4.821.578 - SESPDC/SC

and hereby grants this certificate in accordance with the provisions of CNE/CES Resolution No. 1, of 04/06/2018.

São Paulo, June 22, 2022

Maria Stela Reis Crotti
Director of Student Relations and Services

Alcir Vilela Junior
Director of Graduate and Extension Programs

Graduate

SENAC UNIVERSITY CENTER
Reaccredited by MEC Ordinance No. 494 of 04/11/2017
Federal Official Gazette of 04/12/2017
Director of graduate and extension programs: Alcir Vilela Junior
Director of student relations and services: Maria Stela Reis Crotti

SENAC UNIVERSITY CENTER
Directorate of Student Relations and Services
Certificates and Diplomas Records Department

Certificate registered in accordance with the provisions of §1 of Article 8 of CNE/CES Resolution No. 1, of 04/06/2018 - Federal Official Gazette of 04/09/2018.

Case No. 022.0000035677

Registration No. 0000035677

São Paulo, June 22, 2022

Marcia Aparecida da Silva Lima
Records Coordinator

Glossary:
CNE/CES: National Education Council / Higher Education Chamber
MEC: Ministry of Education
SENAC: National Service for Commercial Learning

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I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

_____ Date: December 29, 2025.

CENTRO UNIVERSITÁRIO SENAC

Portaria de recredenciamento MEC nº 494, de 11/4/2017 - DOU nº 71, Seção 1, página 13, de 12/4/2017

Av. Eng. Eusébio Stevaux, 823 - Santo Amaro - São Paulo - SP - CEP:04696-000

HISTÓRICO ESCOLAR

Curso de Pós-graduação lato sensu: **ESPECIALIZAÇÃO EM CLOUD COMPUTING**

Fundamentação legal: **Resolução CONSUNI nº 010/2016, de 28/9/2015, publicada em 28/9/2015**

Nome: **Amim Moisés Salum Knabben** RA: **1142197869**

Data de nascimento: 10/05/1986 Natural do Estado: Santa Catarina Nacionalidade: brasileira

RG nº 4.821.578/SC

Ano	Componentes Curriculares	C.H.	Nota Final	Resultado	Docente	Qualificação
2020	APLICATIVOS EM NUVEM	32:00	9,5	Aprovado	Vladimir Aparecido Esteves	Mestre
2020	ARQUITETURA DE SOLUÇÃO DE COMPUTAÇÃO EM NUVEM	32:00	9,5	Aprovado	Adenilson Boccato de Almeida	Mestre
2020	FUNDAMENTOS DE COMPUTAÇÃO EM NUVEM	40:00	9,5	Aprovado	Adenilson Boccato de Almeida	Mestre
2020	TRABALHO DE CONCLUSÃO DE CURSO I: METODOLOGIA	16:00	10	Aprovado	Dirceu Matheus Junior	Mestre
2021	AVALIAÇÃO DO USO DE COMPUTAÇÃO EM NUVEM	32:00	8,5	Aprovado	Monica Mancini	Doutora
2021	GERENCIAMENTO DE SERVIÇOS EM NUVEM	40:00	8,0	Aprovado	Maria Helena Mauro	Mestra
2021	IMPLEMENTAÇÃO E MIGRAÇÃO PARA COMPUTAÇÃO EM NUVEM	24:00	9,0	Aprovado	Vladimir Aparecido Esteves	Mestre
2021	INFRAESTRUTURA E PLATAFORMA COMO SERVIÇO	40:00	8,5	Aprovado	Alexandre Lopes Machado	Doutor
2021	SEGURANÇA NA COMPUTAÇÃO EM NUVEM	32:00	9,5	Aprovado	Monica Mancini	Doutora
2021	TENDÊNCIAS E INOVAÇÃO COM COMPUTAÇÃO EM NUVEM	40:00	8,5	Aprovado	Alexandre Lopes Machado	Doutor
2021	TRABALHO DE CONCLUSÃO DE CURSO II: DESENVOLVIMENTO	16:00	8,5	Aprovado	Vladimir Aparecido Esteves	Mestre
2021	TRABALHO DE CONCLUSÃO DE CURSO III: CONCLUSÃO	16:00	8,5	Aprovado	Vladimir Aparecido Esteves	Mestre

Total da carga horária do curso:	360:00
Total da carga horária cursada:	360:00

Período de realização: 12/08/2020 a 14/11/2021

Conclusão do curso: 07/04/2022 | Data de expedição do certificado: 22/06/2022

Título do TCC: Operações de aprendizado de máquina em infraestrutura nativas em nuvem
Nota: 8,5

Declaramos que o referido curso cumpre todas as disposições da Resolução CNE/CES nº 1, de 6/4/2018 - DOU de 9/4/2018.

O presente documento não contém emendas ou rasuras. Ficam para todos os efeitos invalidados os espaços inutilizados.

São Paulo, 7 de julho de 2022

Maria Stela Reis Crotti
Diretora de relacionamento e serviços ao aluno
RG nº 12.367.251-X/SP

Operador do Sistema: SECRETARIA_ACADEMICA em 07/07/2022 às 21:41

Senac

CENTRO UNIVERSITÁRIO SENAC

O diretor de pós-graduação e extensão do Centro Universitário Senac, no uso de suas atribuições e tendo em vista os resultados obtidos, confere o certificado de pós-graduação lato sensu - especialização em

Cloud Computing

área de conhecimento: tecnologias da informação e comunicação a

Amim Moisés Salum Knabben

nacionalidade brasileira, natural do Estado de Santa Catarina, nascido a 10 de maio de 1986,
RG nº 4.821.578 - SESPDC/SC

e outorga-lhe o presente certificado, de acordo com o disposto na Resolução CNE/CES nº 1, de 6/4/2018.

São Paulo, 22 de junho de 2022

Maria Stela Reis Crotti
Diretora de relacionamento e serviços ao aluno

Alcir Vilela Junior
Diretor de pós-graduação e extensão

Concluinte

CENTRO UNIVERSITÁRIO SENAC
Recredenciado pela Portaria MEC nº 494, de 11/4/2017
Diário Oficial da União de 12/4/2017
Diretor de pós-graduação e extensão: Alcir Vilela Junior
Diretora de relacionamento e serviços ao aluno: Maria Stela Reis Crotti

CENTRO UNIVERSITÁRIO SENAC
Diretoria de Relacionamento e Serviços ao Aluno
Setor de Registros de Certificados e Diplomas

Certificado registrado de acordo com o disposto no § 1º do art. 8º da Resolução CNE/CES nº 1, de 6/4/2018 - DOU de 9/4/2018.

Processo nº 2022.0000035677

Registro nº 0000035677

São Paulo, 22 de junho de 2022

Marcia Aparecida da Silva Lima
Coordenadora de registros

FSC
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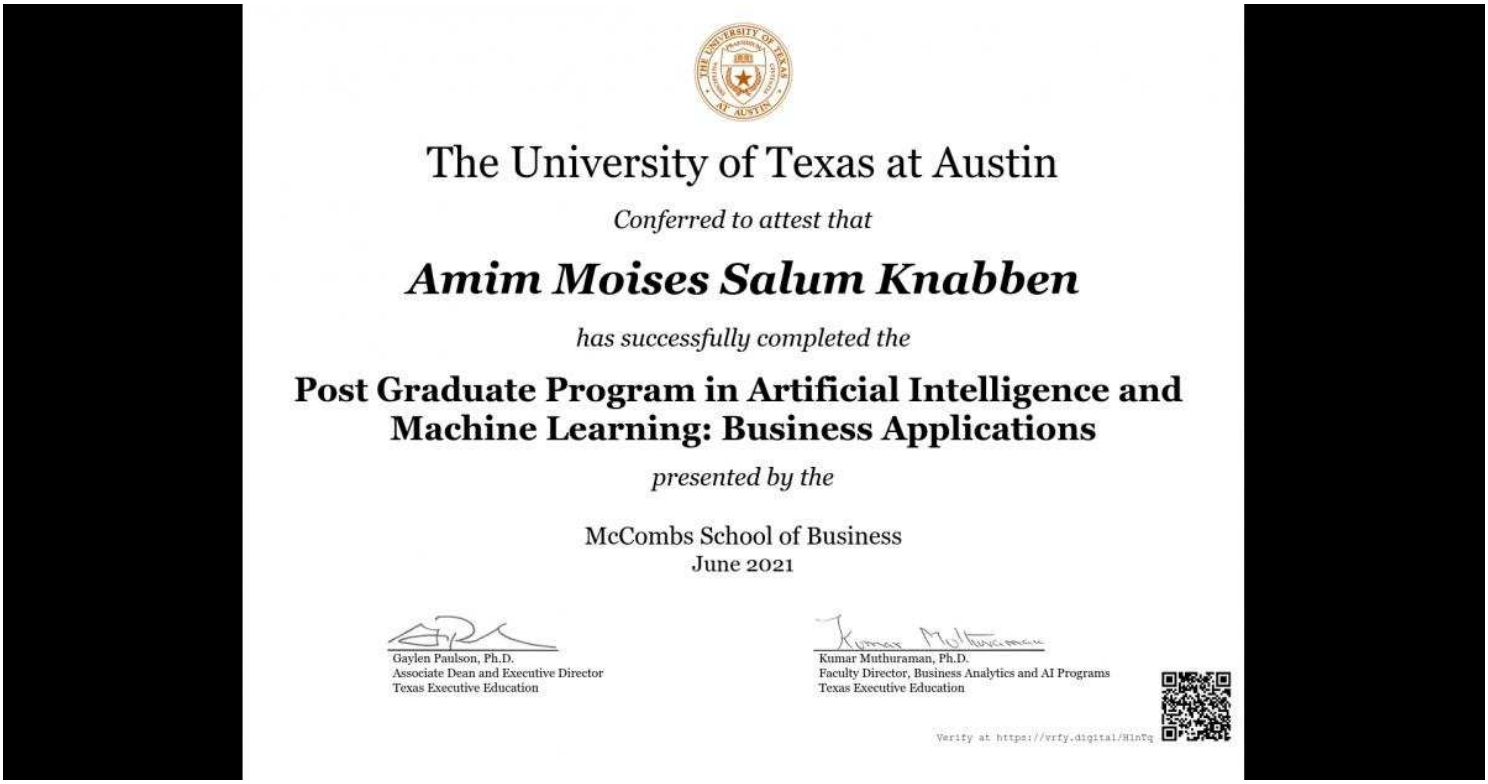
FSC® C126427



The University of Texas at Austin

Conferred to attest that

Amim Moises Salum Knabben

has successfully completed the

Post Graduate Program in Artificial Intelligence and Machine Learning: Business Applications

presented by the

McCombs School of Business
June 2021

Gaylen Paulson, Ph.D.
Associate Dean and Executive Director
Texas Executive Education

Kumar Muthuraman, Ph.D.
Faculty Director, Business Analytics and AI Programs
Texas Executive Education

Verify at https://vrfy.digital/H1nTq

UNIVERSITY OF SOUTHERN SANTA CATARINA

The President of the University of Southern Santa Catarina, in the exercise of his duties and in view of the completion of the Higher Education Program in Financial Management on December 21, 2018, confers the degree of Technologist in Financial Management to

AMIM MOISÉS SALUM KNABBEN

holder of Identity Card No. 4821578 SESP/SC, Brazilian, born on May 10, 1986, in the State of Santa Catarina, hereby granted this Diploma, entitling him to all legal rights and privileges.

Tubarão (Santa Catarina), February 7, 2019

AMIM MOISÉS SALUM KNABBEN	SOLANGE ANTUNES DE SOUZA	BERNARDINO JOSÉ DA SILVA	MAURI LUIZ HEERDT
Graduate	*General Secretary of Education*	*Coordinator*	*President*

080159

Graduate: AMIM MOISÉS SALUM KNABBEN

UNIVERSITY OF SOUTHERN SANTA CATARINA - UNISUL

Establishment: Municipal Law No. 443, 10/18/ 1967 - Transformation into a University: Law No. 1,388/1989
Recognition: MEC (Ministry of Education) Ordinance No. 28, 01/27/1989, published in the Official Gazette on 01/30/1989
Renewal of Accreditation: Decree No. 780, 11/06/2007, published in the State Official Gazette on 11/06/2007
Reaccreditation: MEC Ordinance No. 197, 03/07/2018, published in the Official Gazette on 03/08/2018
Distance Education Authorization: Ordinance No. 238, 02/21/2003, published in the Official Gazette on 02/24/2003
Distance Education Accreditation: Ordinance No. 1,067, 05/08/2003, published in the Official Gazette on 05/09/2003
Distance Education Authorization: Ordinance No. 2,146, 07/16/2004, published in the Official Gazette on 07/20/2004

Program: Higher Education Program in Financial Management

Authorization: MEC Ordinance No. 238, of 02/21/2003, published in the Official Gazette on 02/24/2003
Creation: CÂMGES Resolution No. 3, of 04/16/2003
Authorization: Decree No. 944, of 10/23/2003, published in the State Official Gazette of Santa Catarina on 10/23/2003
Transformation: CÂMGES Resolution No. 2, of 03/28/2005
Transformation: Decree No. 3,122, of 05/09/2005, published in the State Official Gazette of Santa Catarina on 05/09/2005
Recognition: Decree No. 4,619, of 08/08/2006, published in the State Official Gazette of Santa Catarina on 08/08/2006
Change of Name: CÂMGES Resolution No. 73, of 12/20/2006
Renewal of Recognition: Decree No. 1,104, of 08/06/2012, published in the State Official Gazette of Santa Catarina on 08/07/2012
Renewal of Recognition: Decree No. 2,237, of 06/10/2014, published in the State Official Gazette of Santa Catarina on 06/11/2014
Renewal of Recognition: Ordinance No. 274, of 04/03/2017, published in the Official Gazette on 04/04/2017

Vice President's Office of Administration and Academic Services - Pró-ASA
General Secretariat of Education - GSE

Diploma registered under No. 14560, Book TECV - 19, pages 162, on 03/01/2019.

Process No. 806-527214-GRAD-2019.

In accordance with Article 48 of Law No. 9.394, of 12/20/1996 – Law of Guidelines and Bases of National Education.

Tubarão (Santa Catarina), 03/01/2019

MICHELE DOS SANTOS ESPINDOLA BALSINI
Registration of Diplomas and Certificates
President's Delegation - Ordinance No. 1297/201

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Date: December 29, 2025.

UNIVERSIDADE DO SUL DE SANTA CATARINA

O Reitor da Universidade do Sul de Santa Catarina, no uso de suas atribuições e tendo em vista a conclusão do Curso Superior de Tecnologia em Gestão Financeira, em 21 de dezembro de 2018, confere o título de Tecnólogo em Gestão Financeira a

AMIM MOISÉS SALUM KNABBEN

portador da carteira de identidade nº 4821578 - SESP/SC, de nacionalidade brasileira, nascido em 10 de maio de 1986, natural do Estado de Santa Catarina, outorgando-lhe o presente Diploma, para que lhe sejam assegurados todos os direitos e prerrogativas legais.

Tubarão (SC), 7 de fevereiro de 2019

AMIM MOISÉS SALUM KNABBEN	SOLANGE ANTUNES DE SOUZA	BERNARDINO JOSÉ DA SILVA	MAURI LUIZ HEERDT
Diplomado	*Secretária Geral de Ensino*	*Coordenador*	*Reitor*

080159

Aluno: AMIM MOISÉS SALUM KNABBEN

UNIVERSIDADE DO SUL DE SANTA CATARINA - UNISUL
Criação: Lei Municipal nº 443, 18/10/1967 - Transformação em Universidade: Lei nº 1.388/1989
Reconhecimento: Portaria MEC nº 28, de 27/1/1989, publicada no D.O.U. de 30/1/1989
Renovação do Credenciamento: Decreto nº 780, de 6/11/2007, publicado no DOE-SC de 6/11/2007
Recredenciamento: Portaria MEC nº 197, de 7/3/2018, publicada no D.O.U. de 8/3/2018
Autorização à distância: Portaria nº 238, de 21/2/2003, publicada no D.O.U. de 24/2/2003.
Credenciamento à distância: Portaria nº 1.067, de 8/5/2003, publicada no D.O.U. de 9/5/2003.
Autorização à distância: Portaria nº 2.146, de 16/7/2004, publicada no D.O.U. de 20/7/2004.

Curso: Curso Superior de Tecnologia em Gestão Financeira

Autorização: Portaria MEC Nº 238 de 21/2/2003, publicada no D.O.U. de 24/2/2003
Criação: Resolução CÂMGES Nº 3 de 16/4/2003
Autorização: Decreto Nº 944 de 23/10/2003, publicado no D.O.E. SC de 23/10/2003
Transformação: Resolução CÂMGES Nº 2 de 28/3/2005
Transformação: Decreto Nº 3.122 de 9/5/2005, publicado no D.O.E. SC de 9/5/2005
Reconhecimento: Decreto Nº 4.619 de 8/8/2006, publicado no D.O.E. SC de 8/8/2006
Alteração de Nomenclatura: Resolução CÂMGES Nº 73 de 20/12/2006
Renovação do Reconhecimento: Decreto Nº 1.104 de 6/8/2012, publicado no D.O.E. SC de 7/8/2012
Renovação do Reconhecimento: Decreto Nº 2.237 de 10/6/2014, publicado no D.O.E. SC de 11/6/2014
Renovação de Reconhecimento: Portaria Nº 274 de 3/4/2017, publicado no D.O.U. de 4/4/2017

Pró-Reitoria de Administração e Serviços Acadêmicos - Pró-ASA
Secretaria Geral de Ensino - SGE

Diploma registrado sob nº 14560, livro TECV - 19, folhas 162, em 1/3/2019.

Processo nº 806-527214-GRAD-2019.

Nos termos do Art 48 da Lei nº 9.394, de 20/12/1996 - Lei de Diretrizes e Bases da Educação Nacional.

Tubarão (SC), 1/3/2019

MICHELE DOS SANTOS ESPINDOLA BALSINI
Registro de Diplomas e Certificados
Delegação do Reitor Portaria GR nº 1297/2011

European University of the Atlantic

The President of the European University of the Atlantic

on the recommendation of its faculty, grants

[The text in this column contains the exact same content as the one on the left, but in Portuguese]

AMIM MOISÉS SALUM KNABBEN

with identification document no. 4821578

who has satisfactorily fulfilled all the requirements demanded by the Examination Committee, conferring the degree of

Master's in Strategic Management in Software Engineering

[The text in this column contains the exact same content as the one on the left, but in Portuguese]

with all the rights and privileges corresponding to this degree.
This graduate program consists of 90 ECTS.
Issued in Santander (Spain) on June 23, 2023.

The President

Rubén Calderón Iglesias

Head of Graduate Diplomas Section

Silvia Báguena Villalobos

Title Registration: F13684 / 2023

This specific degree is awarded in accordance with the provisions of Article 34.1 of Organic Law 6/2001 on Universities, of December 21, without affecting the degrees officially issued by the President of H. M. the King.

European University of the Atlantic

IT IS HEREBY RESOLVED

that AMIM MOISÉS SALUM KNABBEN, with identification document no. 4821578, has satisfactorily completed the Master's Degree in Strategic Management in Software Engineering program with a course load of 90 credits and a duration of 24 months. This program is covered by the Framework Collaboration Agreement signed between the European University of the Atlantic and the Iberoamerican University Foundation (FUNIBER).

The grades obtained are as follows (scale of 0 to 10 points, with 7.0 being the minimum passing grade):

Subjects	Grades
Strategic Management and Planning	9.5
Reengineering, Strategy, and Management of Systems and ICT	8.7
Strategic Human Resource Management	8.2
Information Society and Change	9.1
Conflict Resolution and Negotiation Techniques	8
Team Management Techniques	8.2
Virtual Collaborative Work Environments	9.4
Programming Languages and Paradigms	9.4
Architectures, Networks, and Distributed Systems	9
Web Technology and Web Engineering	8.8
Comprehensive Analysis and Design of Systems and Requirements	9.2
Data Modeling and Database Design	9.4
Network Management and Security	9.4
Database and Information Resource Management	9.4
Software Business Processes	9.2
Business Intelligence and Document Management	8.5
Business Management Systems Integration	8
ICT Project Management	8
Case Study and Resolution	10
Scientific Research Methodology	9.3

Final Thesis	Grade
Cloud-native architecture: infrastructure and application strategies	10

Santander, May 9, 2023.

SILVIA BÁGUENA VILLALOBOS

HEAD OF DIPLOMA SECTION
GRADUATE UNIT

European University of the Atlantic
Cantabria Science and Technology Park
C/Isabel Torres 21 - 39011 Santander: Spain
Tax ID: G39764972

I, Pedro Peski Ribeiro Lopes, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Spanish and Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

_____ **Date: December 16, 2025.**

Universidad Europea del Atlántico

El Rector de la Universidad Europea del Atlántico
O Reitor da Universidad Europea del Atlántico

por recomendación de su Claustro docente otorga a

por recomendação do seu Corpo docente confere a

AMIM MOISÉS SALUM KNABBEN

con documento de identificación nº 4821578

com documento de identificação nº 4821578

quien ha superado satisfactoriamente todos los requisitos exigidos por la Junta de Calificaciones por lo que se confiere el título propio de

quem cumpriu satisfatoriamente todos os requisitos exigidos pela Banca Avaliadora pelo qual se confere o título de

Máster en Dirección Estratégica en Ingeniería de Software

Mestrado em Direção Estratégica em Engenharia de Software

con todos los derechos y privilegios correspondientes a este título.
Este Título propio de Postgrado consta de 90 ECTS.
Expedido en Santander (España) a 23 de junio de 2023.

com todos os direitos e privilégios correspondentes a este título.
Este Programa de Pós-graduação consta de 90 ECTS.
Expedido em Santander (Espanha) em 23 de junho de 2023.

El Rector
O Reitor

Rubén Calderón Iglesias

Jefa Sección Títulos de Postgrado
Chefe Secão Diplomas de Pós-Graduação

Silvia Báguena Villalobos

Registro de Títulos nº 13684 / 2023

Este título propio se otorga conforme a lo dispuesto en el art. 34.1 de la Ley Orgánica 6/2001 de Universidades, de 21 de diciembre, de partida de los títulos que son de carácter oficial se expiden por el Rector en nombre de S.M. el Rey.
O presente Título próprio é concedido em conformidade com o disposto no art. 34.1 da Lei Orgânica 6/2001 de Universidades, de 21 de dezembro, sendo títulos oficiais com validade oficial pelo Reitor em nome de S.M. o Rei.

Universidad Europea del Atlántico

DISPÕE-SE

Que AMIM MOISÉS SALUM KNABBEN, com documento de identificação n° 4821578, concluiu satisfatoriamente o programa do Título Próprio de Máster en Dirección Estratégica en Ingeniería de Software com carga letiva de 90 créditos e duração de 24 meses. Este programa se encontra sob o amparo do Convênio Marco de Colaboração firmado entre a Universidad Europea del Atlántico e a Fundação Universitária Iberoamericana (FUNIBER).

As notas obtidas são as seguintes (escala de 0 a 10 pontos, sendo 7,0 a nota mínima de aprovação):

Disciplinas	Notas
Dirección y Planificación Estratégica	9.5
Reingeniería, Estrategia y Dirección de Sistemas y TIC	8.7
Gestión Estratégica de los Recursos Humanos	8.2
Sociedad de la Información y del Cambio	9.1
Técnicas de resolución de conflictos y negociación	8
Técnicas de Dirección de Equipos de Trabajo	8.2
Entornos virtuales de trabajo Colaborativo	9.4
Lenguajes y Paradigmas de Programación	9.4
Arquitecturas, Redes y Sistemas Distribuidos	9
Tecnología Web y Web Engineering	8.8
Análisis y Diseño Integral de Sistemas y Requerimientos	9.2
Modelamiento de Datos y Diseño de Bases de Datos	9.4
Gestión y Seguridad de Redes	9.4
Gestión de Bases de Datos y Recursos de Información	9.4
Proceso de Negocio de Software	9.2
Business Intelligence y Gestión Documental	8.5
Integración de los Sistemas de Gestión Empresarial	8
Dirección y Gestión de Proyectos TIC	8
Estudio y Resolución de Casos	10
Metodología de la investigación científica	9.3

Projeto Final	Nota
Arquitetura nativa em nuvem: estratégias de infraestrutura e aplicações	10

Santander, a 09 de maio de 2023.

SILVIA BÁGUENA VILLALOBOS

CHEFE SEÇÃO DE DIPLOMAS
UNIDADE DE PÓS-GRADUAÇÃO

Universidad Europea del Atlántico
Parque Científico y Tecnológico de Cantabria
C/Isabel Torres 21 · 39011 Santander, España
CIF: G39764972

ILLINOIS

COURSE CERTIFICATE

Aug 3, 2020

Amim Knabben

has successfully completed

Cloud Computing Applications, Part 1: Cloud Systems and Infrastructure

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Roy H. Campbell
Professor of Computer Science
Department of Computer Science

Reza Farivar
Data Engineering Manager at Capital One,
Adjunct Research Assistant Professor of Computer Science
Department of Computer Science

Verify at:
https://coursera.org/verify/MSSC4K49S9FV

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Jul 5, 2020

Amim Knabben

has successfully completed

Cloud Computing Concepts, Part 1

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

Indranil Gupta
Professor
Department of Computer Science
University of Illinois at Urbana-Champaign

Verify at:
https://coursera.org/verify/2MB96NNH3J7W

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Aug 6, 2020

Amim Knabben

has successfully completed

Cloud Computing Applications, Part 2: Big Data and Applications in the Cloud

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Reza Farivar
Data Engineering Manager at Capital One,
Adjunct Research Assistant Professor of Computer Science
Department of Computer Science

Roy H. Campbell
Professor of Computer Science
Department of Computer Science

Verify at:
https://coursera.org/verify/F79QKKG2DPV8

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 20, 2020

Amim Knabben

has successfully completed

Introduction to Graph Theory

an online non-credit course authorized by University of California San Diego and offered through Coursera

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

Verify at:
https://coursera.org/verify/9G4XQKZXAS8A

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 4, 2020

Amim Knabben

has successfully completed

Mathematical Thinking in Computer Science

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Alexander S. Kulikov, Visiting Professor, Department of Computer Science and Engineering;
Michael Levin, Associate Professor, Computer Science;
Vladimir Podolskii, Associate Professor, Computer Science

Verify at:
https://coursera.org/verify/XZCJYHVNN3UW

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 20, 2020

Amim Knabben

has successfully completed

Number Theory and Cryptography

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Alexander S. Kulikov, Visiting Professor, Department of Computer Science and Engineering;
Michael Levin, Associate Professor, Computer Science;
Vladimir Podolskii, Associate Professor, Computer Science

Verify at:
https://coursera.org/verify/G48KT6SVAZ7R

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Aug 6, 2020

Amim Knabben

has successfully completed

Cloud Computing Concepts: Part 2

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

Indranil Gupta
Professor
Department of Computer Science
University of Illinois at Urbana-Champaign

Verify at:
https://coursera.org/verify/TFPQQP4NRWG7

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 11, 2020

Amim Knabben

has successfully completed

Combinatorics and Probability

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Verify at:
https://coursera.org/verify/5PFQ4A5Z6BXJ
Coursera has confirmed the identity of this individual and their participation in the course.

Google Cloud

COURSE CERTIFICATE

Jul 5, 2020

Amim Knabben

has successfully completed

Serverless Machine Learning with Tensorflow on Google Cloud Platform

an online non-credit course authorized by Google Cloud and offered through Coursera

Google Cloud Training

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Verify at:
https://coursera.org/verify/XEDQ52BA6SFJ

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 27, 2020

Amim Knabben

has successfully completed

Delivery Problem

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Alexander S. Kulikov Professor Department of Mathematics and Computer Science	Владимир Подольский Доцент Факультет компьютерных наук НИУ ВШЭ

Verify at:
https://coursera.org/verify/55T5WZ3C3PL7

Coursera has confirmed the identity of this individual and their participation in the course.

UDACITY

NANODEGREE PROGRAM

VERIFIED CERTIFICATE OF COMPLETION

Data Structures & Algorithms

CERTIFICATE OF COMPLETION

Awarded to

Amim Knabben

SEBASTIAN THRUN

Founder, Udacity

June 27, 2021

Udacity has confirmed the participation of this individual in this program. Confirm program completion at confirm.udacity.com/FH7UG6FA

VERIFIED CERTIFICATE OF COMPLETION

April 18, 2017

Amim Knabben

Has successfully completed the

Full Stack Web Developer Nanodegree

NANODEGREE PROGRAM

Sebastian Thrun
Founder, Udacity

Co-Created with

Amazon Web Services Github AT&T Google

5 Courses

Mathematical Thinking in Computer Science

Combinatorics and Probability

Introduction to Graph Theory

Number Theory and Cryptography

Delivery Problem

UC San Diego

Sep 27, 2020

Amim Knabben

has successfully completed the online, non-credit Specialization

Introduction to Discrete Mathematics for Computer Science

Discrete Math is needed to see mathematical structures in the object you work with, and understand their properties. This ability is important for software engineers, data scientists, security and financial analysts (it is not a coincidence that math puzzles are often used for interviews). We cover the basic notions and results (combinatorics, graphs, probability, number theory) that are universally needed.

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Michael Levin
Lecturer
Computer Science

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
https://coursera.org/verify/specialization/S5YMUNS4H64D

Exhibit B. Receipt of lesser nationally or internationally recognized prizes or awards for excellence

Evidence that the petitioner is the recipient of the award

2021 Awards

2021 Contributor Award Recipients

By Special Interest Group (SIG) with listed message/nomination reason

API Machinery

Han Kang, @logicalhan
For their continued contributions related to the overlap with SIG Instrumentation.

Antoine Pelisse
For their long term effort and leadership on server-side-apply and the related wg-api-expression.

Apps

Aldo Culquicondor
For improving the jobs controller, expanding its functionality

Architecture

Riaan Kleinhans
Conformance Work

Madhav Jivrajani
KEP Reading Club

Kirsten Garrison, @kikisdeliveryservice
Enhancements Subproject

Elana Hashman, @ehashdn
Production Readiness Reviews

Autoscaling

mounts due to recursive fsgroup and fixing issues in order to move the volume expansion feature to GA

Jiawei Wang
Driving the CSI migration effort that has been ongoing for several releases and hosting meetings and working with maintainers across many cloud providers to move in-tree volume plugins to out-of-tree CSI drivers.

Testing

Arnaud Meukam, @ameukam
k8s-infra prow and migrating scalability jobs

Chao Dai
Automating prow updates

Claudiu Belu
Migrating Kubernetes to k8s.gcr.io/e2e-test-images

UI

Sebastian Florek
Marcin Maciaszczyk
Both of their efforts maintaining Kubernetes Dashboard for over five years and keeping the Kubernetes Dashboard project healthy and secure

Usability

Cleopatra Enjeck
Helping SIG Usability operationalize how the SIG weighs feedback in the jobs-to-be-done study and helping the SIG make progress in analyzing the results of the study

Josie Pynadath
Interviewing and collecting results for SIG Usability's study

Carl J. Pearson, @carljpearson
Creating and presenting a framework on how to "code" results from the jobs-to-be-done study that enables new contributors

Windows

Ravi Gudimetla

Established and runs the weekly SIG Windows CI/Triage meeting and for cross-SIG collaboration to get a new OS field added to Pod specs (alpha in v1.23) which will help solve many SIG Windows related issues such as being able to enforce OS specific policies during admission time.

Amim Knabben, @ak_ndb

Improving the developer experience for Windows related changes in Kubernetes which eases the on-ramp of developers to be involved with SIG Windows.

AMIM KNABBEN
FOR WORK IN IMPROVING THE DEVELOPER EXPERIENCE
FOR WINDOWS RELATED CHANGES IN KUBERNETES
WHICH EASES THE ON-RAMP OF DEVELOPERS TO BE
INVOLVED WITH SIG WINDOWS

Contact

www.linkedin.com/in/jayunit100 (LinkedIn)
careers.stackoverflow.com/jayunit100 (Other)
jayunit100.blogspot.com (Blog)

Top Skills

golang
Google Kubernetes Engine (GKE)
Amazon Web Services (AWS)

Publications

Core Kubernetes
20+ Software and Cloud Technology Patents
...10+ Publications in NCBI peer reviewed journals...

Jay Vyas

Engineering @ Tesla !
Mountain View, California, United States

Summary

- Staff engineer @ Tesla
- Kubernetes maintainer
- Always turn my camera on
- Author of "Core Kubernetes" (Manning)
- PhD in biomedical sciences (bioinformatics)
- 50 patents, 10 peer reviewed publications
- Apache Software Foundation member/PMC
- ex sig windows lead, implemented defauls ns labels, network policy conformance, and many other k8s improvements, commiter across several apache/cncf project.

Experience

Tesla

Staff Software Engineer
October 2023 - Present (2 years 5 months)

Working on our internal Vehicle Engineering software platforms.

VMware

4 years 4 months

Staff Software Engineer
June 2021 - October 2023 (2 years 5 months)
Massachusetts, United States

Tech lead for multiple teams, initiatives:
- TKG Nodes (GPU, windows, CNI, and OSImage hardening)
- "Thick" Edge on TKG retail edge sites Lead
- Release engineering lead for TKG on an as needed basis to keep delivery on track.
- TL for TKG Windows: Windows nodes for K8s via cluster-api.
- SmE on several Sev1 k8s product technical escalations (military , government,...)
- Squashed guru / code nit culture wherever I could.

Member of Technical Staff

July 2019 - June 2021 (2 years)
Massachusetts, United States

Upstream aligned tech lead for our Tanzu Kubernetes Grid platform.... Implemented and wrote business critical KEPs that kept kubernetes and VMWare healthy and reliable...

- Built TKG's Kubernetes on Windows and defined windows conformance https://github.com/kubernetes/enhancements/issues/2578
- started and implemented windows Conformance initiative in upstream k8s https://github.com/kubernetes/enhancements/tree/master/keps/sig-windows/2578-windows-conformance
- made Network Policy Validation a "thing" for k8s that was standardized https://github.com/kubernetes/enhancements/tree/master/keps/sig-network/1611-network-policy-validation
- implemented Default Namespace labels: https://github.com/kubernetes/enhancements/tree/master/keps/sig-api-machinery/2161-apiserver-default-labels feature in k8s

Platform9 Systems
Software Engineer
January 2019 - July 2019 (7 months)

K8s Engineering on the PMK and Managed Apps platforms.

- Architected observability and metrics.
- Internal training around Kubernetes core principles.
- K8s consulting work our largest customers
- Built developer tooling and selinux tooling for SE's in the field (https://github.com/platform9/new-go-app, https://github.com/platform9/selinuxmodules)
- Prototyped our move to tracing (jaeger) for our node backend.

Synopsys Inc
Principal Engineer, Cloud Native Chief Architect, Consultant
May 2017 - April 2019 (2 years)

- Built our initial Kubernetes offering as a SaaS on Google Cloud, migrated 20 (or so) initial core customers. It's now in the 1000s.
- Merged the technology stacks of Synopsys/Blackduck after acquisition to work together (i.e. binary analysis for contianers that ran on blackduck etc....).

- Post full time : Continued as a consulting engagement, continued advising senior leadership, VP and Directors towards the ongoing R&D strategy for our cloud native app delivery models for the broader Synopsys/Blackduck teams.

Red Hat
Principal Software Engineer
November 2012 - May 2017 (4 years 7 months)
Wesftord, MA

- implemented features in Kubernetes core, scheduling, and e2e contributor, maintainer.
- Major contributor to the Hadoop ecosystem and its role in the GlusterFS community.
- Original automation of the HA (kcm & scheduling) lease arch for upstream K8s.
- Big Data: Contributed several enhancements to projects in the Apache Software foundation (including Hadoop, Spark, BigTop, ...)
- Storage/Emerging Technologies: Enablement of bigdata workloads on various filesystems with difference CAP and semantic properties.
- Implemented predicate caching in the upstream k8s scheduler to enable 100+ node openshift clusters w 1000s of apps.
- Did the 1st implementation of spark and cassandra on kubernetes ; working out kinks of SparkStreaming etc on k8s.

Brandwatch Peerindex
BigData Engineer (Hadoop, EMR, ML platforms)
May 2011 - November 2012 (1 year 7 months)
London, United Kingdom and Hartford CT

- Built Hadoop pipelines for terabytes of ingest from concept->prototype->deployment on our DAG MapReduce platform (implementing RDD style data transformations in the pre spark era).
- Took over and maintained PISAE (Peerindex social action engine) platform.
- Development of our backend MapReduce java systems - largely based on ingestion and feature extraction.
- Scaled our ETL pipeline for social data to manage millions of social interactions, including key-value storage (DynamoDB) for our frontends.

UConn Health
Open-Source Bioinformatics Developer Java Developer & Researcher
August 2007 - December 2011 (4 years 5 months)

- Developer/designer of a highly interactive client side application for fully integrated molecular visualization platform (VENN) which allows for Jmol based 3D analysis of protein evolutionary conservation (See Publications).

- Created a cross platform VM for NMR data processing (vagrant, virtualbox, and ubuntu).

- Deployed plug-in based modules for implementation of molecular analysis algorithms in a single computational proteomics framework.

- Optimized and changed features of the application to suit emergent needs, such as protein domain oriented analyses.

- Data Warehousing/Modelling of Functional Minimotifs

- Designed a Hibernate API and MySQL data repository along with an java based which integrated proteomic information spanning protein motifs, functional annotations, taxonomy data, sequences, and protein domains.

- Architected an Expert System (MIMOSA) which automatically implemented various text mining and correlation scoring algorithms using ontologies for 5,000,000 publically available medical abstracts.

- Developed a plug in oriented Graphical User Interface using the Java Swing framework which enabled database driven, high throughput annotation of "minimotifs".

- Collaborated on several database aspects of the NIH funded, publically available, web based Minimotif miner application (http://mnm.engr.uconn.edu).

- Engineered Java API's for reading/writing of large, binary FID representations present in vendor-specific NMR spectral data types in support of an open-source translation and conversion API.

- Prototyped a Swing-based workflow building environment (time domain NMR data proc, as a custom 2D graphical app allowing on the fly creation of data-processing "actors", w/ reloadable and persistent state and associated, workflows which triggered offline data processing tasks.

- Design and architecture of an integrated NMR visual data mining platform, as part of the Rudolf project using and Clojure to wrap existing Java API's.

Rudolf Inc
Founder
2004 - 2010 (6 years)
London, United Kingdom ; Hartford CT ;

- Reverse engineering of UML design for various specifications in accountancy systems.
- Design of custom LISP /Python applications for ensuring transaction completeness in large, distributed MySQL systems.
- Evaluation of e-commerce solutions (i.e. google checkout, paypal) with home grown product inventory and management systems.
- Rapid software prototying, informatics consulting, and helping individuals get up to speed with data mining and machine learning related initiatives.
- See also work at Peerindex, above - which contracted through Rudolf Inc. for bigdata consulting for a portion of my work there.

Community Health Resources
Java EE / Hibernate developer for medical informatics applications
2005 - 2006 (1 year)
CT

Java Engineer working on medical informatics software applications :
Retooled a legacy software system built on proprietary software libraries into a homegrown, dynamic Java EE Servlet/JSP MVC framework with a backend system that dynamically mapped objects onto database stored procedures using runtime injection. Backend system was successfully deployed and completed in a short period of time - and the engineers that took this project over were quite happy with its modular design which allowed them to easily introduce static components or changes into the data model without needing to recompile, rebuild, or even redeploy the system.

Education

University of Connecticut
Doctor of Philosophy (PhD), Bioinformatics · (2007 - 2011)

Rensselaer Polytechnic Institute
Master of Science (MS), Computer Science · (2004 - 2006)

University of Arizona

Bachelor's degree, Mathematics (Computer Science) · (2001 - 2004)

University of Arizona

Bachelor's degree, Mathematics

University of San Francisco

December 4, 2025

To Whom It May Concern,

I am pleased to write this letter in strong support of Mr. Amim Moises Salum Knabben in connection with his petition for classification as an individual of extraordinary ability under the EB-1A category. I offer this recommendation based on my professional experience as a Staff Engineer at Tesla, a core contributor and maintainer within the Kubernetes ecosystem, and a long-standing member of the Apache Software Foundation, where I have served on Project Management Committees and contributed to major open-source initiatives, including Hadoop, Bigtop, and Spark. In addition to my industry leadership, I am the author of *Core Kubernetes* (Manning Publications), hold a Ph.D. in biomedical sciences with a focus on bioinformatics, and am the named inventor on more than fifty patents, with multiple peer-reviewed scientific publications. Through these roles, I regularly evaluate technical originality, large-scale impact, and sustained excellence at the highest levels of software engineering and innovation, placing me in a strong position to assess the extraordinary nature of Mr. Knabben's achievements.

Mr. Knabben received the SIG Windows Kubernetes Contributor Award in 2021. This award was granted by the Cloud Native Computing Foundation (CNCF) through the Kubernetes SIG Windows project, with the recognition ceremony conducted virtually as part of the official events of the Kubernetes community. The Kubernetes project is incubated within the CNCF, and SIG Windows is a Special Interest Group focused on Windows-related work within that project.

The CNCF is an international nonprofit organization of prestige and is part of the Linux Foundation. It hosts critical open-source infrastructure projects, including Kubernetes. Kubernetes is widely recognized as the leading platform for container orchestration, used by millions of developers and major technology companies such as Google, Microsoft, Amazon, and IBM. The CNCF is recognized globally as an authority on cloud-native technologies and governs technological ecosystems that support a large share of modern internet infrastructure. Within this framework, the Kubernetes Contributor Awards, including the SIG Windows Kubernetes Contributor Award, are among the highest honors in the global cloud-native development community.

The criteria for granting the award are technical merit, innovation, and significant impact on the Kubernetes community, including exceptional technical contributions that substantially improved the experience of developers working with Windows in Kubernetes, facilitated engagement by new developers in SIG Windows by reducing entry barriers, and improved the quality and accessibility of local Windows clusters in the Kubernetes project. The award is explicitly intended to recognize contributors who have demonstrated sustained technical excellence and community leadership, such as Mr. Knabben.

The selectivity and competitive nature of this recognition are also clearly stated. The Kubernetes Contributor Awards are described as highly selective, recognizing each year only a small number of exceptional contributors from among thousands of active developers in the global Kubernetes community. In 2021, only a limited number of awards were granted across different categories, selected from a community of more than 3,000 active contributors. Within SIG Windows, there were dozens of participants. Under these conditions, the selection of Mr. Knabben for the SIG Windows Kubernetes Contributor Award represents an acknowledgment made within a large, active, and technically demanding international community.

The award is officially documented on the Kubernetes community website maintained by the CNCF, which serves as the permanent registry of Kubernetes community recognitions. The 2021 awards page records the contributions recognized and specifically highlights work described as “Improving the developer experience for Windows-related changes in Kubernetes, which eases the on-ramp of developers to be involved with SIG Windows.” In addition, the materials report that such recognitions are typically disseminated through CNCF official channels, such as blogs, community newsletters, and conferences, including KubeCon. They are also associated with the official Kubernetes YouTube channel, which has 23.3k subscribers, as well as additional public references, including video segments and social media posts.

This award bears a direct and substantial relationship to Mr. Knabben’s principal field of endeavor. It recognizes expertise that lies at the core of his professional activity, including software engineering, Windows systems, Kubernetes, and developer experience. The recognition reflects original and technically significant contributions to distributed systems architecture, improvements to complex development workflows, and leadership in enabling broad developer participation in mission-critical infrastructure projects. These contributions demonstrate a level of technical influence and professional distinction that is directly applicable to, and continues to shape, Mr. Knabben’s ongoing work in large-scale software development and enterprise technological infrastructure.

Thank you for your time and consideration in support of Mr. Amim Moises Salum Knabben’s petition.

Sincerely

Jay Vyas
Staff Software Engineer, Tesla
Former Staff Software Engineer,
Broadcom SIG Windows Emeritus Tech-Lead
jvyas@tesla.com
9784054461

Contributors Awards Ceremony Playbook

awards/ README.md – list of everyone playbook.md

Kubernetes has a tradition of yearly peer awards. These are commonly handed out during the end-of-year Contributor Summit. The CNCF typically has awards as part of KubeCon + CloudNativeCon, the Kubernetes awards are a compliment to those, and are meant to be peer awards.

Ideals and Values

Typically each SIG will nominate two(2) recipients for an award. Ultimately the individual SIGs are responsible for their award nominations, in certain cases there may be an example of excellent work that requires more than two awards, co-chairs should use their judgement to determine if this is the case.

Here are a few suggestions or ideas that make for a good award nominee:

- Contributions to the project
  - Should consider contributions to the SIG and to upstream Kubernetes
    - Many contributors work on other projects, these awards are specific to Kubernetes itself
    - In some cases a top-level CNCF award nomination might be more appropriate
  - Should consider contributions to other SIGs, especially cross-SIG collaboration
  - Should consider large multi-cycle work that encompasses multiple releases
- Kubernetes Values
  - Is the person exemplifying the Kubernetes values?
  - Remember that non-code contributions are important!
- Community Input
  - Leads should take input from other SIG members, larger SIGs might consider mentioning the awards ahead of time to allow members to communicate nominations to leads.
- Celebrate the Individuals as people
  - Awards are affiliation-free and earned by individuals, we do not mention vendors at all as part of this process
  - Vendors are encouraged to celebrate individuals via their own social properties, the awards themselves will remain neutral
- Spread the Wealth
  - Should consider lookin at underserved areas of the project
  - For every "rock star" there's probably a few people quietly doing excellent work.
  - Should consider past awards, having the same person winning the award repeatedly shouldn't be the norm.

Process

Coordinating with the CNCF

Typically a representative from the CNCF will be assigned to assist with the awards. Payment of the vendor MUST happen through the CNCF, do NOT pay for community awards with your work credit card, keep the awards affiliation free.

Coordinate with the CNCF to determine the budget to ensure that the awards fit within it. Shipping costs and other fees like customs, etc. might be taken into account so it's important to set this goal first before proceeding.

The CNCF will also help brainstorm awards and recommend vendors, if you need it. Generally speaking we try to come up with something creative and unique.

Determining the Award

Our community is clever and unconventional, the awards should be classy, but quirky. The awards should also be a "surprise" when unveiled, discussion about the awards are done publically as part of SIG Contributor Experience. The contributor summit subproject owners will determine how best to keep this open secret, usually leaving out the award specifics from the meeting notes or meeting recordingss are enough to keep it fun and a surprise.

Here are some examples of past awards:

Choosing a Vendor

Vendors are important! Our community is spread all over the world, so when choosing a vendor consider if they can ship to where our contributors are, not just the US and EU.

Checklist

- [ ] Contributor Summit Planning Begins
- [ ] Event Team should assign someone as the Awards Lead and one or two shadows
- [ ] Awards Team determines what kind of award for that Contributor Summit
- [ ] Awards team should plan for 3 weeks of vendor research
- [ ] Once an Award has been selected, the vendor needs to be approved by the CNCF Representative
    - [ ] Can they ship to the countries we need?
    - [ ] Do they accept our payment options?
    - [ ] Ideally the vendor can handle accepting a planning spreadsheet from us so they can produce the awards.
    - [ ] Customs considerations
    - [ ] Other things Deb looks for go here
- [ ] Create an Awards Spreadsheet
    - [ ] With the Kubernetes Gsuite Account

- [ ] Only the Awards team, the CNCF Representative, the lead of the Contributor Summit Planning, and SIG Contributor Experience should have access to this sheet.
- [ ] Awards Nomination should be announced to the SIG Chairs/TLs via their normal channels.
- [ ] Awards team collects nominations from the SIGs and fills out the tracking sheet.
    - [ ] Name, Address, Phone number, github handle, email - Vendors will usually need more info depending on customs
- [ ] CNCF Representative proofs and ensures the sheet has all the fields/information that the vendor requires.
- [ ] Do not assume that nominators, coworkers, etc. have spelled submissions correctly, you need to double check each name and address, having to redo an award because of a typo can get expensive.

- [ ] Coordinate with the Marketing Team
    - [ ] Awards tweets for the ceremony
    - [ ] Awards tweets for the winners
    - [ ] Blog post announcing the winners, and linking to the contributor site page
    - [ ] Amplify awardee social media posts when they post pics of their awards, thanking people, etc.

Awards Ceremony

The Awards Ceremony is typically done as part of the Contributor Summit. There may be cases where the ceremony is seperate or virtual, here are some tips:

- Ceremony should be fun, but taken seriously.
    - Awards team should either be the hosts or select someone appropriate to be the hosts.
    - The ceremony is all about the awardees and celebrating their achievements.
    - [link to last one]
- Ceremony should be easy to share and easy for other contributors to celebrate.
    - Pregenerate tweets so people can share.
    - Try to mention names and github/twitter/social handles so that it's easier for the audience to share
    - (This should be rewritten so it doesn't sound so partisan but whatever, jorge) - If you have time find tell one of their coworkers in the project so that their employer knows that they're getting an award, we want companies to celebrate and reward when their employees do awesome things. Get them in on the secret. :D
- During actual Contributor Summits
    - It might be more efficient for the team to bring one example of the award from the vendor to show as part of the ceremony instead of bringing all the awards to the event!
    - Consider awardee's travel luggage, in many cases drop shipping will be much easier and cheaper.
- Virtual Contributor Summits
    - Usually a picture of the award is sufficient and then drop ship the rest.

- Awardees should be made aware of logistics
  - The awards are given during the time right up to the end of year holidays, shipping after the holidays is usually easier, awardees should be given a general idea of when the award ships.

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CLOUD NATIVE COMPUTING FOUNDATION

ANNOUNCEMENTS / STAFF POST

CNCF Honors Innovators and Defenders with 2025 Community Awards at KubeCon + CloudNativeCon North America

Honorees span end users, maintainers, mentors, and long-time contributors, reflecting the strength and diversity of the cloud native ecosystem

Key Highlights

- CNCF announced the KubeCon + CloudNativeCon North America 2025 Community Award winners for technical leadership, community dedication, mentorship, and end-user contributions.
- These honors reflect the diverse contributions that strengthen the entire cloud native ecosystem, defend open source from patent trolls via the Cloud Native Heroes Challenge, and highlight projects that underpin large-scale AI infrastructure.
- The global cloud native community benefits, encompassing over 270k contributors and 728 member organizations, as the awards celebrate sustained commitment and build community capacity for long-term health.
- Winners received their recognition and trophies during the award ceremony at KubeCon + CloudNativeCon North America in Atlanta on November 12, 2025.

ATLANTA, KUBECON + CLOUDNATIVECON NORTH AMERICA—November 12, 2025— The **Cloud Native Computing Foundation®** (CNCF®), which builds sustainable ecosystems for cloud native software, today announced the winners of the CNCF Community Awards at the annual **KubeCon + CloudNativeCon North America**.

Over the years, the CNCF Community Awards aim to recognize and highlight key contributors across all **CNCF projects** and **Technical Advisory Groups** (TAGs). These awards celebrate those committed to shaping the cloud native ecosystem, acknowledging outstanding contributions in areas such as technical leadership, documentation, mentorship, and end-user implementation. Winners were recognized and received their trophies during the event's **award ceremony**.

"This year's award recipients reflect what it really takes to go above and beyond in sustaining the cloud native community," said Chris Aniszczyk, CTO, CNCF. "From mentoring new contributors to maintaining docs to hosting community events, the contributors are doing the hard work that helps our projects grow, stay reliable, and move faster together."

Lifetime Achievement Award

The Lifetime Achievement Award is presented to longtime contributors who have significantly influenced cloud native technologies and demonstrated sustained commitment to the ecosystem. This award honors individuals whose efforts over the past decade have been instrumental in shaping and supporting the Kubernetes and CNCF communities.

This event's recipients are:

- Dawn Chen (**dchen1107**)
- Kevin Wang (**kevinskwang**)

"The Lifetime Achievement Award honors contributors whose dedication serves as the bedrock of the cloud native movement, guaranteeing its strength and continuity for generations to come," said Jonathan Bryce, executive director, CNCF. "The work done by leaders like Dawn Chen and Kevin Wang not only benefits today's projects, but actively ensures the enduring health of the entire cloud native community."

Top End User Award

The Top End User Award celebrates organizations that have significantly advanced cloud native development both internally and across the wider CNCF community. These recipients, drawn from innovative organizations whose primary goal is to harness cloud native architectures to solve real-world problems, are vital to the ecosystem's momentum. Honored contributions often include publishing internal practices, sharing reference architectures, and dedicating substantial staff resources to contributing across multiple CNCF projects.

This event's winner is:

- **Michelin**

Top Committer Award

The Top Committer Award, also known as the Top Cloud Native Committer Award, recognizes an individual for their incredible technical skills and notable technical achievements across one or multiple CNCF projects as a maintainer. This accolade highlights sustained, collaborative development that benefits CNCF-hosted projects as a whole. The award honors those who demonstrate deep technical impact whose work reflects dedicated contributions essential for the ongoing vitality of the cloud native ecosystem.

This event's winner is:

- John Howard (**howardjohn**)

Chop Wood Carry Water Award

The Chop Wood Carry Water Award recognizes the essential, behind-the-scenes community work crucial to maintaining the health and longevity of the cloud native ecosystem. This accolade honors contributors who spend countless hours completing often mundane but critical tasks, such as supporting documentation, organizing meetups, and maintaining project infrastructure.

CNCF offers special recognition for Han Kang, one of the honorees, who **recently passed away**. A longtime contributor to Kubernetes SIG Node and kubelet, Han's generosity and technical

insight had a profound effect on the community. He is remembered not only for his work, but also for his spirit of mentorship and collaboration.

Additional winners are:

- Mario Jason Braganza (**jasonbraganza**)
- Lubomir I. Ivanov (**neolit123**)
- Daniel Hawton (**dhawton**)
- Janet Kuo (**janetkuo**)
- Yuichi Nakamura (**yuichi-nakamura**)

Outstanding Mentor Award

The Outstanding Mentor Award celebrates contributions to mentorship and community growth. For this inaugural award, CNCF recognizes Lee Calcote, founder of Layer5, for serving as a mentor over 60 times in the past five years through CNCF and Linux Foundation programs. His work across initiatives and the fact that he's had several mentees go on to become CNCF project maintainers in their own right reflect his sustained commitment to supporting newcomers and building community capacity. Learn more about his mentorship history **here**.

Cloud Native Hero

The Cloud Native Hero Award recognizes individuals who champion the defense of open source technology by participating in the **CNCF and Unified Patents Cloud Native Heroes Challenge**. This award honors cloud native developers and technologists for submitting "prior art," which is crucial in countering patent threats and helping to stop nuisance lawsuits launched by patent trolls who increasingly target cloud native open source due to its success. By engaging in this challenge, participants actively protect the ecosystem and have the opportunity to win cash prizes, swag, and conference tickets.

This event's winners are:

- Chris Buccella
- Ketan Sachdeva
- Ritu Tyagi

TAGGIE

The TAGGIE award is a key recognition within the CNCF Community Awards, given to individuals who have done the most to advance the CNCF TAGs. This award celebrates those contributors whose efforts are instrumental in scaling contributions from the technical and user community while ensuring the integrity and quality necessary to make cloud native ubiquitous.

This event's winners are:

- Dawn Foster (**geekygirldawn**)
- Marina Moore (**mnm678**)
- Leo Pahlke (**leonardpahlke**)
- Mauricio Salatino (**salaboy**)

End User Case Study Contest

The End User Case Study Contest highlights real-world adoption of CNCF projects. This year's winner, **OpenAI**, which will present its case study on Wednesday, November 12, was recognized for its work using **Fluent Bit** to significantly reduce CPU usage while shipping logs at petabyte scale across Kubernetes environments.

OpenAI needed to ship unprecedented volumes of logs but faced CPU throttling issues that made scaling its DaemonSets infeasible. After examining how Fluent Bit uses system calls, the team found some problems with inotify and suggested other methods: more frequent checking of file status and reducing the frequency. The result was reduced CPU usage and improved reliability—work is now being prepared as an upstream patch for the broader Fluent Bit and OSS community.

Lorem Ipsum

The Lorem Ipsum award, also known as the Top Documentarian award, recognizes excellence in documentation contributions made to the CNCF and its hosted projects. Recipients are honored for their efforts in enhancing both the usability and inclusion across CNCF projects.

- Aidan Delaney (**aidandelaney**)
- Tiffany Hrabusa (**tiffany76**)
- Seokho Son (**seokho-son**)

CNCF encourages the **community** to participate in ongoing initiatives that strengthen the cloud native ecosystem. Technologists are invited to join the CNCF **End User Community** to collaborate with peers and contribute to the influential group of organizations harnessing cloud native architectures to solve real-world problems. The community is also encouraged to check the CNCF **calendar** for details on local events and register for **KubeCon + CloudNativeCon Europe**.

About Cloud Native Computing Foundation

Cloud native computing empowers organizations to build and run scalable applications with an open source software stack in public, private, and hybrid clouds. The Cloud Native Computing Foundation (CNCF) hosts critical components of the global technology infrastructure, including Kubernetes, Prometheus, and Envoy. CNCF brings together the industry's top developers, end users, and vendors and runs the largest open source developer conferences in the world. Supported by nearly 800 members, including the world's largest cloud computing and software companies, as well as over 200 innovative startups, CNCF is part of the nonprofit Linux Foundation. For more information, please visit **www.cncf.io**.

###

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The Linux Foundation

pr@cncf.io

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March 24, 2026

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Exhibit C. Membership in associations in the field for which classification is sought that require outstanding achievements of their members, as judged by recognized national or international experts in their disciplines or field

This badge was issued to Amim Moises Salum Knabben

Date issued: September 30, 2024 | Expires: October 01, 2026

Verify | Celebrate

CNCF Ambassador - H1 2024 - 2026

Issued by The Linux Foundation

Cloud Native Ambassadors (CNAs) are credible advocates for the cloud native ecosystem, driven by their passion for CNCF technologies, projects, and furthering the open source mission.

Learn more

Experience | Advanced | Years | Free

Skills

Advocacy | Cloud Native | Community | Industry Evangelist | Open Source | Subject Matter Expert In Cloud + Cloud Native | Thought Leadership

Earning Criteria

An active contributor to a CNCF project (Min. 20 DevStats score or Current voter status), a SIG or TAG member, an active leader in the community with a minimum of 1 year of experience in organizing events (virtual/in-person), speaking at events, mentoring others, and/or creating content (e.g., blogs, videos, etc.).

Standards

CNCF Ambassador Standards of Excellence

You are selected because of your accomplishments, and your ability to help others learn, collaborate and accomplish their own goals. These Standards of Excellence are a set of guidelines and best practices for engaging with CNCF and the broader community and make it easier for CNCF Ambassadors to contribute to a positive culture and environment.

Related

CNCF Ambassador - Spring 2023

CNCF Ambassador - Fall 2023

CD Foundation Ambassador 2023

This badge was issued to Amim Moises Salum Knabben

Date issued: March 24, 2023 | **Expired: March 31, 2024**

Verify

CNCF Ambassador - Spring 2023

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Related

CNCF Ambassador - Fall 2023

CD Foundation Ambassador 2023

Speaker - cdCon Japan 2023

Contact

www.linkedin.com/in/audramontenegro (LinkedIn)

Top Skills

Thought Leadership
global community
Video Production

Languages

Spanish
Sign Languages

Certifications

Inclusive Speaker Orientation
Speaker - KCD Colombia 2023
Inclusive Open Source Community Orientation
Speaker: KubeCon + CloudNativeCon Europe 2025

Honors-Awards

Toastmasters International Competent Communicator
Speaker at KCD Colombia

Audra Montenegro

Community Builder | Production Manager
United States

Summary

A highly motivated production and content professional with experience in global events, such as large tech conferences and small summits. I am an experienced speaker and program committee liaison, and project manager, and have a demonstrated history of working in the e-learning, tech industry.

A creative problem solver who brings an innovative approach to difficult business situations, including tight deadlines. I cultivate and maintain strong relationships with organizers, vendors, and speaking talent inside and outside of any of my employers.

My passion is not only connecting and spotlighting industry leaders, innovators and technical practitioners, but also orchestrating between teams and elevating new voices.

Experience

Cloud Native Computing Foundation (CNCF)

Community Outreach Manager
June 2022 - Present (3 years 9 months)

Manage the production and process for the following since...
2025
* CNCF Ambassador Program
* Member Online Programs
2024
* The ChatLoopBackOff (CLBO) LIVE demos of CNCF projects by CNCF ambassadors
* Videography on-site at KubeCon + CloudNativeCon Europe and North American events
2022
* Kubernetes Community Days (KCDs) global summit-like events
* Cloud Native Community Groups (CNCGs) and their global meetups

Monte Communications
Co-founder and CEO
November 2021 - Present (4 years 4 months)
Sonoma County, California, United States

Open||Source||Data Podcast
Executive Producer
June 2020 - December 2023 (3 years 7 months)
United States

Tune-in to open source veteran, Sam Ramji as he hosts conversations with innovators who are shaping the future of open source data, open source software, data on Kubernetes, data in DevOps, data in AI, and more.

With 32 episodes released thus far, three seasons, and a bi-weekly cadence, the Open||Source||Data podcast has grown an organic following of almost 10,000 listeners. Have a look at the link below to see what friends we have made. Guests range from technical practitioners, startup founders and CEOs, Data Scientists, Data Analysts, experts in AI and ML, and other open source and data veterans.

Cassandra Summit
Speaker Promotions
May 2023 - November 2023 (7 months)
San Jose, California, United States

Liaison for speakers between The Linux Foundation, Constantia (for Planet Cassandra), and DataStax (for Apache Cassandra Corner podcast) to help promote each speaker's session as desired.

DataStax
Event Leader
April 2020 - November 2021 (1 year 8 months)
Santa Clara, California, United States

Virtual event production and creative experiences. Producer of the Open|| Source||Data podcast with host, Sam Ramji. Highlighted a variety of voices from community to thought leadership. Managed speaker placement in third party event opportunities or sponsorships. Producer of The Data Innovation Hour program with customers, partners, and analysts, covering industry topics.

O'Reilly Media
7 years 3 months

Senior Conference Speaker Manager
February 2015 - April 2020 (5 years 3 months)
California, United States

From keynote coordination and rehearsals, to liaising with program chairs and committee members, to content quality control with speakers and emcees - I not only managed the logistics of content but worked on a team of 4 with 1 direct report.

I also helped manages vendor relationships, worked closely with Sales on partner speaking opportunities and nurturing sponsors, coordinated speaker self-promotion, encouraged a diverse lineup, coordinated of ancillary events, and helped enforce a code of conduct.

I also managed a budget, and had fun with speaker swag ideas.

See below position for more...

Conference Speaker Manager
February 2014 - February 2015 (1 year 1 month)

Project manager for up to 8 program committees per year. Developed and produced online conference agendas. Negotiated and managed speaking contracts, as a liaison between speakers and internal teams. Wrote, managed, and distributed logistical correspondence to conference speakers for a minimum of 6 in-person conferences a year with anywhere from 75-300 speakers per event. Oversaw and managed all aspects of speaker logistics, from content submission to audiovisual requirements to travel, fees, lodging, and honorarium. Managed plenary production for each conference.

PR/Marketing Associate
June 2013 - January 2014 (8 months)
Sebastopol, CA

Coordinated, performed, and hosted webcasts. Active in social media (Facebook, Google Plus, Twitter, Tumblr, LinkedIn): posting/finding content, and performing analysis. Communication and organization in programs such as Wordpress, iPost, and FileMaker. Coordinated book reviews, all while maintaining author relationships. Marketed a variety of events: webcasts, camps, and conferences all while providing community outreach.

Marketing Specialist
February 2013 - June 2013 (5 months)
Sebastopol, CA

Design: Processed book covers, worked in Photoshop, assisted with the creation of marketing materials, in addition to the use of Excel, Adobe, Google Docs and Word on a daily basis.
I also worked through the entire process of creating, ordering, and sending author frames while nurturing author relationships.

Marketing: Used Filemaker, Excel, and Google Docs in daily research practices. Coordinated with organizers of book clubs, user groups and meetups on a weekly basis. Provided editorial services like proofing newsletters, and reviewing and testing website for a good UX.

Cyrus
Restaurant Professional
May 2007 - December 2013 (6 years 8 months)
Healdsburg, California, United States

FRONT OF THE HOUSE, FINE DINING, AND PRIVATE EVENTS
(with a pause in-between working at other restaurants like Stark Reality Restaurants, and A16 from 2008-2010)

This 2 out 3 Michelin-star restaurant, showcased a friendly, white-glove and black suit service experience. I served my time under Maître d'Hôtel/Owner, Nick Peyton. At the time, Nick had about 20 years of experience managing many of San Francisco's top restaurants. My role was hybrid, so I also served under pioneer and award-winning chef, Douglas Keane.

Education

Sonoma State University
Bachelor of Business Administration (BBA), Business Administration-Marketing · (2010 - 2011)

San Francisco State University
Business Administration · (2008 - 2010)

Santa Rosa Junior College
AA, Social & Behavioral Sciences · (2005 - 2008)

Linux Foundation
2810 N Church St PMB 57274
Wilmington, DE 19802-444
Phone/Fax: +1 415 723 9709
https://www.linuxfoundation.org

2026, January 21

To Whom It May Concern,

My name is Audra Montenegro, and I serve as the Community Outreach Manager at the Cloud Native Computing Foundation (CNCF). In this position, I am responsible for overseeing community engagement initiatives and have direct access to official records, program criteria, and committee decisions governing admission to the CNCF Ambassador Program.

Through my institutional responsibilities, I became familiar with Amim Moises Salum Knabben's professional record when his candidacy for the CNCF Ambassador Program was reviewed and approved. Our records confirm that Mr. Knabben has been an active member of the Cloud Native Computing Foundation Ambassador Program from October 2023 to the present. In parallel, CNCF records show that Mr. Knabben serves as Founder and Lead Organizer of the Cloud Native Community Group Santa Catarina and has organized Kubernetes Community Days São Paulo and Floripa events in Brazil in 2024.

The CNCF Ambassador Program is not open to automatic enrollment or admission based solely on payment of a fee. Instead, candidates are evaluated by a Selection Committee composed of CNCF staff members, who are professionals with recognized expertise in cloud-native computing, distributed systems, and open-source software development. Moreover, the program relies on documented evidence of sustained community engagement and technical contribution rather than on self-designation or general interest.

The Selection Committee applies objective and experience-based criteria when assessing each application. The requirements include years of demonstrated senior-level community leadership and measurable achievements, such as a DevStats score of 20 or higher, which quantifies technical contributions to CNCF projects. In addition, the Committee examines whether the candidate has served on KubeCon program committees, organized Kubernetes Community Days, led Cloud Native Community Groups, produced technical publications, delivered invited conference talks, and held leadership roles in Special Interest Groups. Endorsements from CNCF project maintainers or senior ambassadors are also considered as part of this evaluative process.

Only applicants who satisfy these standards are approved. Internal program data indicate that only approximately 0.003% of applicants from the global cloud-native community are admitted in a typical year. This proportion must be viewed in light of CNCF’s role as a professional body with approximately 850 member organizations and a global developer community exceeding 5.6 million practitioners, with international and worldwide reach. For over nine years, since 2015, the Association has promoted standards of excellence, continuing education, and ethical practice in cloud-native computing and open-source infrastructure technologies.

Mr. Knabben was approved for CNCF Ambassador membership following a review of his professional record, which documented his leadership in the Cloud Native and Kubernetes communities and his role as a Software Engineer at Broadcom. In particular, his leadership of the Cloud Native Community Group Santa Catarina and his work organizing Kubernetes Community Days São Paulo and Floripa events in Brazil in 2024 align directly with the Ambassador Program criteria regarding organizing Kubernetes Community

Days, leading Cloud Native Community Groups, and maintaining years of senior community leadership. The Committee's decision reflects the Association's understanding that Mr. Knabben is a professional of distinction whose contributions advance cloud-native computing, Kubernetes adoption, open-source software development, and distributed systems engineering, including a documented impact in Latin America.

In addition to his Ambassador status, CNCF records show that Mr. Knabben has obtained the Golden Kubestronaut recognition. According to CNCF information, Kubestronaut status corresponds to holding five CNCF certifications. In comparison, Golden Kubestronaut status corresponds to holding 15 certifications, of which 14 are from CNCF and 1 from The Linux Foundation. As of 11 July, there are 299 CNCF Ambassadors, 2,401 Kubestronauts, 187 Golden Kubestronauts, 34 individuals who are simultaneously Kubestronaut and Ambassador, six individuals who are simultaneously Golden Kubestronaut and Ambassador, 3 Golden Kubestronauts in Brazil, and two individuals in Brazil who are both Golden Kubestronaut and Ambassador. Within this context, Mr. Knabben is among the small group of professionals worldwide who simultaneously hold CNCF Ambassador status and Golden Kubestronaut recognition, and he is among the first three individuals in Brazil to achieve the Golden Kubestronaut level that underpins this combined profile. These quantitative figures provide additional, certification-based evidence of the advanced technical achievements recorded for Mr. Knabben. This Golden Kubestronaut recognition is independent of, and in addition to, his CNCF Ambassador membership and does not constitute a separate association or a formal admission criterion for the Ambassador Program.

This letter serves to document the nature of Mr. Knabben's CNCF Ambassador membership and the standards under which it was granted. I remain available for further details.

Sincerely,

Audra Montenegro
Community Outreach Manager
Cloud Native Computing Foundation (CNCF)
amontenegro@linuxfoundation.org

Contact

www.linkedin.com/in/katzricardo (LinkedIn)
www.rkatz.xyz (Blog)

Top Skills

Cloud-Native Applications
System Architecture
Software Infrastructure

Languages

English (Professional Working)
Portuguese (Native or Bilingual)
Hebrew (Elementary)

Certifications

Program Committee Member: KubeCon + CloudNativeCon North America 2020
Speaker: KubeCon + CloudNativeCon North America 2023
Program Committee Member: KubeCon + CloudNativeCon North America 2021

Ricardo Pchevuzinske Katz

Software Engineer / Kubernetes contributor
São Paulo, São Paulo, Brazil

Summary

Maintainer of Kubernetes' ingress-nginx, and also contributor of Kubernetes main code.

Software engineer with experience in Golang.

Experience in Unix / Linux since 2004, including configuring the system, vulnerability and security analysis, hardening, troubleshooting and configuring the Operating System and a diverse set of services

Experience with virtualization environments, including designing, planning and implementing solutions with VMWare vSphere and Citrix Xen Server.

Specialties: Kubernetes, Golang, IT Security, Virtualization, Security Analysis, New Technologies, New Unix and Linux Stuff and Software, former LPIC-3, CKA and CKAD.

Experience

Red Hat
Principal Software Engineer
August 2025 - Present (7 months)

Broadcom
Principal Software Engineer
December 2023 - June 2025 (1 year 7 months)
São Paulo, Brazil

VMware
Staff Software Engineer
May 2021 - December 2023 (2 years 8 months)
São Paulo, Brasil

Serpro
12 years 1 month

Lead of Cloud Engineering
May 2017 - April 2021 (4 years)
São Paulo Area, Brazil

Manage teams to achieve the best architecture and operation SERPRO's Cloud computing, primarly the "Estaleiro" Project (SERPRO Private Cloud) and the Brazilian Government Public Cloud.

Automation Manager
November 2014 - May 2017 (2 years 7 months)
Brasília Area, Brazil

Support Analyst (Unix / Linux / Virtualization Specialist)
April 2009 - November 2014 (5 years 8 months)

Proteus Security Systems
Security Analyst
April 2008 - April 2009 (1 year 1 month)

AS2MWPC Consultoria e Treinamento
Owner
July 2006 - March 2008 (1 year 9 months)

MHK
IT Manager
July 2005 - May 2006 (11 months)

IPT
Estagiário Redes
March 2004 - July 2005 (1 year 5 months)

Education

Faculdade de Tecnologia de São Paulo - FATEC-SP
Tecnologo, Processamento de Dados · (2004 - 2007)

Faculdade IBTA
Pós, Segurança da Informação · (2008 - 2009)

December 3, 2025

To the USCIS Immigration Officer,

My name is RICARDO PCHEVUZINSKE KATZ, and I serve as a Kubernetes Organization member and maintainer, as well as a Principal Software Engineer at Red Hat. As a long-term contributor to the Kubernetes project, SIG Network co-lead, and member of the Kubernetes Organization, I have direct knowledge of the Kubernetes Organization's membership structure and the professional record that led to the admission of Amim Moises Salum Knabben to this association.

This letter confirms Mr. Knabben's membership in the Kubernetes Organization and clarifies the criteria and procedures for evaluating and approving contributors as part of the association. The Kubernetes project does not have a single corporate entity directly representing it. Still, it operates as a professional open-source community structured around code repositories, Special Interest Groups, and subprojects that coordinate the evolution of cloud-native infrastructure and container orchestration technology.

In this context, admission to Kubernetes Organization membership is not available through open enrollment. Existing Kubernetes members evaluate candidacies and require sponsorship based on demonstrated contributions to the project. The criteria applied in this evaluation include sustained code contributions to Kubernetes core or sub-projects, demonstrated technical expertise through pull requests and code reviews, active participation in Special Interest Groups, commitment to the Kubernetes community values, and endorsements by existing Kubernetes members or reviewers. Only approximately 3 to 5 percent of regular contributors are selected for membership in a typical year, which reflects the strict standards of the admission process.

Mr. Knabben was approved for Kubernetes Organization membership following a review of his work record in Kubernetes. This review confirmed his initial technical tasks in the SIG Node CI Subproject testing board, where he helped to deflake and fix tests for SIG Node, as documented in the project materials, and his active participation in the Working Group Component Standard, including work on the KEP Instance Specific Component available at https://github.com/kubernetes/enhancements/pull/1439. These activities demonstrated sustained code contributions, technical expertise, and engagement in project working groups, which the Kubernetes community requires for sponsorship and a positive evaluation of a membership candidacy.

Subsequently, the board confirmed this membership record, recognizing Mr. Knabben's extraordinary technical leadership in the Kubernetes SIG Windows and SIG Network. This included the complete refactoring of the Network Policy end-to-end test suite, which I co-led with him; contributions to the kube proxy next generation project; migration of more than 10 kubelet flags to the new component configuration standard; and consistent, high-quality code contributions across multiple Kubernetes repositories, with over 190 merged pull requests.

03/Dec/25

These documented contributions illustrate the level of technical responsibility and sustained participation that characterize contributors who have been elevated from regular contributor status to Kubernetes Organization membership.

The Kubernetes project is a professional open-source community with approximately 7,000 active contributors and a global reach. For over 11 years, since 2014, the Kubernetes community has promoted standards of excellence, technical innovation, and collaborative development in cloud native infrastructure and container orchestration. Within this environment, recognition as a Kubernetes Organization member and subsequent elevation to Technical Lead positions indicate that the contributor has met the community's established standards for participation, responsibility, and technical contribution.

I declare that the information above is accurate to the best of my knowledge and in accordance with the records maintained by the Kubernetes project. This letter is provided for the purpose of documenting the nature of Kubernetes Organization membership and the basis on which Amim Moises Salum Knabben was admitted as a member, in accordance with the criteria described. Please feel free to contact me if further verification is required.

Sincerely,

RICARDO PCHEVUZINSKE KATZ
Principal Software Engineer
Kubernetes member and maintainer
SIG Network contributor
katz@redhat.com
+55 11 99135-3617
LINKEDIN: https://br.linkedin.com/in/katzricardo

03/ Dec/ 2025

This badge was issued to Amim Moises Salum Knabben

Date issued: November 06, 2025

Verify

Celebrate

Golden Kubestronaut

Issued by The Linux Foundation

The Golden Kubestronaut badge recognizes an exceptional level of achievement within the Cloud Native ecosystem. Recipients of this badge have demonstrated a sustained commitment to excellence and are recognized as highly accomplished professionals in the field.

Learn more

Certification Advanced Years Free

Earn this badge

Skills

Cloud Native | Kubernetes | Open Source

Earning Criteria

Credential: Awarded to individuals who have successfully completed all CNCF's certifications in addition to the Linux Foundation Certified System Administrator (LFCS).

Education Experience: This distinction reflects a deep and comprehensive understanding of Kubernetes, system administration, and cloud native technologies.

Related

Speaker - KCD Oslo 2024

Cloud Native Developer Bootcamp Graduate

Kubestronaut

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BROWSE GEOGRAPHICALLY

FILTER THE FULL LIST

Search ...

Brazil (87)

All Kubestronauts

RESET

Showing 87 of 3503 Kubestronauts

Amim Moises Salum Knabben

(He/Him)

Andrey Gustavo De Oliveira

(He/Him)

Eduardo Munari

(He/Him)

Pedro Célestin

(He/Him)

Alex Meneguolo Boscolo

(He/Him)

Alexandre Astolpho Thomaz

(He/Him)

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CLOUD NATIVE COMPUTING FOUNDATION

KUBESTRONAUT PROGRAM

Rocket-power your Cloud Native skills

The Kubestronaut program recognizes community leaders who have consistently invested in their ongoing education and grown their skill level with Kubernetes and Cloud Native.

Kubestronauts are people who have successfully passed all CNCF's Kubernetes certifications. Introducing our newest designation, **Golden Kubestronauts** are people who have passed all **CNCF's Cloud Native certifications** plus **LFCS**.

WILL YOU GROW
kubestronaut

Individuals who have successfully passed every CNCF Kubernetes certification – currently **CKA**, **CKAD**, **CKS**, **KCNA**, **KCSA** – will receive the title of **Kubestronaut**, as well as these additional benefits:

- An exclusive Kubestronaut jacket to show off your elite status
- A Credly badge to showcase your expertise
- Access to the dedicated/private Kubestronaut Slack channel and mailing list
- Five coupons for 50%-off certifications each year, for yourself or to share
- 20%-off three CNCF events (KubeCon or KubeDays) a year

Individuals who have successfully passed every **CNCF certification** (currently **CKA**, **CKAD**, **CKS**, **KCNA**, **KCSA**, **PCA**, **ICA**, **CCA**, **CAPA**, **CGOA**, **CBA**, **OTCA**, **KCA**, **CNPA**, **CNPE**) and **LFCS**, will receive the title of **Golden Kubestronaut** for life, as well as these additional benefits:

- An exclusive backpack with the Golden Kubestronaut logo
- A special Golden Kubestronaut beanie
- ThriveOne subscription (as long as the Kubestronaut title is maintained)
- One free ticket per year to any Kubernetes Community Days (KCD)
- One 50%-off KubeCon registration per year
- A 60% discount voucher for each new CNCF certification
- A distinguished **Golden** representation on the Kubestronaut website

Interested in becoming a Kubestronaut (or a Golden Kubestronaut?)

When you pass all required certifications, expect to be emailed by CNCF within a business week for next steps.

All certifications must not have expired to be recognized as a Kubestronaut or a Golden Kubestronaut. For more information, read the **Kubestronaut FAQ** and the **Kubestronaut Standards of Excellence**.

A special thanks to one of our CNCF Ambassadors, Ramesh, for **inspiring us to create the Kubestronaut program**.

CNCF Kubestronauts

BROWSE GEOGRAPHICALLY

FILTER THE FULL LIST

Search ... | All Countries | All Kubestronauts | RESET

Found 3503 Kubestronauts

Aaron Zhilong Wang

(He/Him)

Abdelkoddous Lhajouji

(He/Him)

Abdoul Karim Cissé

(He/Him)

Abdullah AlRasheed

(He/Him)

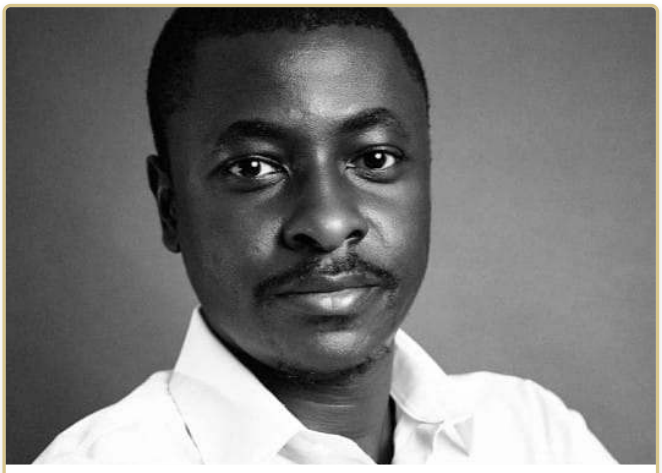
Abiodun Akanbi

Achyutha Mithra

(He/Him)

Alonso Parasxidis Moreno

(He/Him)



Alozie Obuh

Aman Pasi

(He/Him)

Amim Moises Salum Knabben

(He/Him)

Exhibit D. Published material about in professional or major trade publications or other major media, relating to the beneficiary’s work in the field for which the classification is sought

MENU

vmware by Broadcom

Open Source Blog

News & Events | Community

Amusement Parks and Shipping Ports: CNCF Ambassadors Tell All

Suzanne Ambiel
May 24, 2023

A recent Netflix series entitled “The Diplomat” raises the profile of a relatively unsung Ambassador role in the world of international relations. In this fictitious show, the US Ambassador to the UK becomes entwined in a variety of plots and subplots, each extending the common perception of an Ambassador as a ceremonial role to something much more. While the role of the ambassador is embellished to great dramatic effect, it does highlight the significance of formal representation from one nation to another.

Ambassadors play an important bridging role – they’re a go-between, straddling two worlds simultaneously. Beyond international politics, an Ambassador is an authorized messenger or representative. Hailing from one “place” or body of knowledge, they bring their point of view and step into a new place or knowledge space to share and forge connections. In return, they bring new knowledge and insights from their “hosts” back to their “home” – it’s a two-way street. It’s a lot of give and take, listening and learning, teaching and coaching. Key skills for an ambassador? Patience, empathy, curiosity, and a growth mindset.

The CNCF Ambassadors are no different. These community leaders are charged with promoting cloud native technologies in their local communities in a collaborative, inclusive and welcoming way. They’re expected to teach, listen, lead, and contribute. They open the door to new possibilities, and introduce a new way of accomplishing goals. Ambassadors also bring ideas, feedback, and use cases from their community back to the CNCF, helping the CNCF stay connected to the many communities it serves.

Started in 2016, the Ambassador program has grown and evolved – experiencing as much change as the Cloud Native Computing Foundation and its ecosystem has seen. This new class of CNCF Ambassadors represents the next evolution of the Ambassador role. Each selected Ambassador brings a unique, personal point of view and experience. They represent diverse backgrounds – some with years of experience, some just stepping into their technical careers.

Three new Ambassadors hail from VMware – Orlin Vasilev, Amim Moises Salum Knabben, and Whitney Lee. And while you can read their community-facing bio posted on the CNCF site, I’ve reached out to each one to dig a little deeper to discover their VMware persona and perhaps a little more.

Here’s what they had to say:

Orlin Vasilev, Sr. Open Source Community Manager

Based in Sofia, Bulgaria, this is Orlin’s second time as a CNCF Ambassador. Orlin started his VMware journey in 2018 as a Dev Platform Engineer with, according to Orlin, “practically zero experience with Kubernetes.” Today, he leads the community for two VMware-originated cloud native projects: Harbor, a CNCF Graduated Project, that helps users consistently and securely

manage artifacts in a Kubernetes environment and Velero, a cloud native project focused on data migration, recovery and backup for Kubernetes clusters. Orlin also manages the local Bulgaria K8s/CNCF Meetup Group (~1300 members). To say the teams he works with are "diverse" would be an understatement. Let's step into the conversation I had with Orlin:

Suzanne: How do you manage to balance the commercial demands and the community commitments – the tension that exists in your dual identity? Is this hard or easy for you?

Orlin: *[At VMware] my focus is entirely on the Open Source community and quite often I forget that I'm a VMware employee! So for me, it's easy, but maybe not for some of my colleagues who may wonder why I do not always act as VMware-first but community-first.*

Suzanne: Now that you ARE an Ambassador, what do you hope to accomplish in your role? How will being an Ambassador help you do that?

Orlin: *It will allow me to continue what I'm doing but take it even one step further to help others get on board with Kubernetes and the CNCF ecosystem. One of my initiatives is to start a Cloud Native curriculum at the local (Sofia) universities so students can join the community and learn about Kubernetes much easier and sooner – paving the way for their professional life. I've already done a few sessions with students from Technical University of Sofia – more to come!*

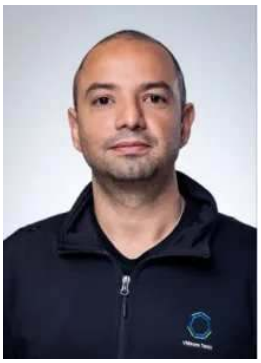
Suzanne: When was the FIRST time you installed or configured a Kubernetes cluster? How did it go?

Orlin: *I suppose it was 2017-ish when I started prepping for my future role at VMware. I started with K8s version around 1.7 or 1.8. It went OK, but it took countless tries to make it work as I wanted to experience "Kubernetes the hard way". But if I compare it to my first attempt to install Linux (Slakware 7.1) back in 2000 (I still have the Install CDs + source code 😃 5 CDs total), it was much better and more successful, for it took me months to install actual running Linux back then!*

Suzanne: Explaining Kubernetes to a newbie can be challenging. How would you explain it to your parent or a 10-year old child?

Orlin: *Kubernetes is like an amusement park conductor – they check the line of kids (pods) who want to get on the ride (node) and tell each kid where to go. They make sure everyone is having fun (monitoring) and that the ride is sound and safe (liveness and readiness probes). If something goes wrong he fixes the issue by either helping the kids (restarting the pod) or fixing the ride (spinning new nodes or trashing broken). Actually I used this explanation to my 7 yo when I was prepping once for a talk!*

Amim Moises Salum Knabben, Senior Member Technical Staff – Tanzu



Amin joined VMware in 2021 on the Tanzu Grid Engineering team – with only two years under his belt, he's making an impact. Based in Brazil, he's been a Kubernetes community contributor since 2020 mainly on SIG-Network and SIG-Windows initiatives. Amim's energy and enthusiasm for all things Cloud Native and Open Source now finds him as one of the 2023 class of CNCF Ambassadors. He's a busy guy, but apparently finds time for a personal blog as well – you can find Amim's thoughts and writings at: https://opssec.in/.

Suzanne: How do you manage to balance the commercial demands and the community commitments – the tension that exists in your dual identity? Is this hard or easy for you?

Amim: *The way I like to balance downstream is contributing what is possible for upstream and reusing it later in the product. In the beginning it is hard to figure out a way to do it, but after you define a workflow the process becomes easier and more fluid. I try to always promote open source collaboration with the intent of creating a healthy ecosystem in all that I do. It's always a balance, a choice, but when you are aware of the choices and the benefits open source offers, it's a big help.*

Suzanne: Now that you ARE an Ambassador, what do you hope to accomplish in your role? How will being an Ambassador help you do that?

Amim: *I'm excited to take on this new role – being an Ambassador will give me an opportunity to get even closer to the community and increase my responsibilities. I've been a contributor for almost three years and I'm ready for this next step! I'll be using this time to provide support for advocacy and create a strong CNCF/Kubernetes network in my local community. Some of my early goals include spreading knowledge through written documentation and videos to help onboarding and to mentor new contributors and users. I have many new ideas and projects and can't wait to get started.*

Suzanne: When was the FIRST time you installed or configured a Kubernetes cluster? How did it go?

Amim: *My first interaction with Kubernetes was around 2017, it was the 1.6 or 1.7 release. I was looking for a reliable way to run Docker containers in production, the plan was to move our workload to containers from the existing VMs. In the beginning I was amazed by the architecture [Kubernetes], but the initial Kubeadm manual installation experience at the time wasn't so straightforward as it is nowadays with managed clusters and facilitators like the ClusterAPI project. I took maybe a week or so to understand the components and get my first cluster running, it gets easier after that* 😊.

Suzanne: Ok, a week. That's not so bad! Imagine you're explaining Kubernetes to a child or a parent. What do you say?

Amim [laughs] *Ok how about this: Imagine you own a Port, and you have cargo ships going in and out, you need to fill and empty these containers (pun intended), and you know all the characteristics of each ship, like: size, capacity limit (TEU), etc. Your job is to maintain the lifecycle of these containers from the yard, find the proper ship, make sure the cranes are working, and so on. That's similar to what a container orchestrator does with multiple computers connected.*

Thanks, Amim! You'll make a fine ambassador, though I might not hire you to pilot my ship!

Whitney Lee, Developer Advocate

Whitney Lee is a flurry of activity – does she ever sit still for more than a day? I doubt it. According to the CNCF Ambassador description, Whitney is a "lovable goofball who enjoys understanding and using tools in the cloud native landscape. Creative and driven, Whitney recently pivoted from an art-related career to one in tech…. And not only does Whitney rock at tech – she literally has toured playing in the band Mutual Benefit on keyboards and vocals."

You can read a more complete profile of this wedding photographer/singer/band member/cool mom/podcast host/CNCF Ambassador by cruising over to our recent profile of Whitney. Suffice to say, Whitney's appointment as a CNCF Ambassador is right on target. Here's an excerpt from my conversation with Whitney:

Suzanne: Now that you ARE an Ambassador, what do you hope to accomplish in your role? How will being an Ambassador help you do that?

Whitney: *When I was new in the cloud native space, it was very intimidating that in every room that I entered, the men *vastly* outnumbered the women. It has taken the time and intentional effort to learn how to proudly take up space, join conversations, and understand that my opinion as a relative beginner has a lot of value.*

Being a CNCF Ambassador gives me connections, credibility, and reach to find and elevate underrepresented voices on the streaming shows that I host. The more visibility we have, the more we can help to create a welcoming environment for everyone. I hope that by being a CNCF ambassador, I can help others who are like me (a woman, and/or older, and/or a career-changer) feel like they can experience success in this field too.

Suzanne: When was the FIRST time you installed or configured a Kubernetes cluster? How did it go?

Whitney: *I first installed OpenShift-flavored Kubernetes when I worked at IBM as part of a training session that I participated in, I think in early 2020- before the pandemic. I remember having hiccups and eventually being successful. To be honest, looking back on the experience, I don't think I fully understood what was happening, I was simply copy-pasting the tutorial commands.*

About a year later, I went through a similar lab that gave a lot more context but still made assumptions about what the participant should know. That time I researched the concepts that I didn't understand and adapted the lab to make it more geared to beginners like me. Then I administered the lab to my team! It was fun.

At VMware, my teammate Layla Porter and I had the honor of working through Kubernetes the Hard Way on a livestream with Kelsey Hightower himself! What a dream.

Out and about

Amim, Whitney, and Orlin bring amazing talent and passion to their many roles: ambassadors for open source, ambassadors for Kubernetes and cloud native, and ambassadors for the communities they represent. It's a big job, but no doubt about it – they're all up to the task. Look for each of these new Ambassadors in your local community or online. You can find Whitney online at her Enlightning podcast; Orlin in Sofia at the Bulgaria K8s/CNCF Meetups and hosting various community meetings and all three as invited hosts for the CNCF Live podcasts found on YouTube. Congratulations to all three! Keep up the great work.

Suzanne Ambiel

Suzanne is the Open Source Director of Marketing and Strategy at VMware. She's been with VMware since 2011 traversing the company landscape: from VMware View to vSAN and now, to…

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SIG Node CI Subproject Celebrates Two Years of Test Improvements

By **Sergey Kanzhelev (Google), Elana Hashman (Red Hat)** | Wednesday, February 16, 2022

Ensuring the reliability of SIG Node upstream code is a continuous effort that takes a lot of behind-the-scenes effort from many contributors. There are frequent releases of Kubernetes, base operating systems, container runtimes, and test infrastructure that result in a complex matrix that requires attention and steady investment to "keep the lights on." In May 2020, the Kubernetes node special interest group ("SIG Node") organized a new subproject for continuous integration (CI) for node-related code and tests. Since its inauguration, the SIG Node CI subproject has run a weekly meeting, and even the full hour is often not enough to complete triage of all bugs, test-related PRs and issues, and discuss all related ongoing work within the subgroup.

Over the past two years, we've fixed merge-blocking and release-blocking tests, reducing time to merge Kubernetes contributors' pull requests thanks to reduced test flakes. When we started, Node test jobs only passed 42% of the time, and through our efforts, we now ensure a consistent >90% job pass rate. We've closed 144 test failure issues and merged 176 pull requests just in kubernetes/kubernetes. And we've helped subproject participants ascend the Kubernetes contributor ladder, with 3 new org members, 6 new reviewers, and 2 new approvers.

The Node CI subproject is an approachable first stop to help new contributors get started with SIG Node. There is a low barrier to entry for new contributors to address high-impact bugs and test fixes, although there is a long road before contributors can climb the entire contributor ladder: it took over a year to establish two new approvers for the group. The complexity of all the different components that power Kubernetes nodes and its test infrastructure requires a sustained investment over a long period for developers to deeply understand the entire system, both at high and low levels of detail.

We have several regular contributors at our meetings, however; our reviewers and approvers pool is still small. It is our goal to continue to grow contributors to ensure a sustainable distribution of work that does not just fall to a few key approvers.

It's not always obvious how subprojects within SIGs are formed, operate, and work. Each is unique to its sponsoring SIG and tailored to the projects that the group is intended to support. As a group that has welcomed many first-time SIG Node contributors, we'd like to share some of the details and accomplishments over the past two years, helping to demystify our inner workings and celebrate the hard work of all our dedicated contributors!

Timeline

May 2020. SIG Node CI group was formed on May 11, 2020, with more than 30 volunteers signed up, to improve SIG Node CI signal and overall observability. Victor Pickard focused on getting testgrid jobs passing when Ning Liao suggested forming a group around this effort and came up with the original group charter document. The SIG Node chairs sponsored group creation with Victor as a subproject lead. Sergey Kanzhelev joined Victor shortly after as a co-lead.

At the kick-off meeting, we discussed which tests to concentrate on fixing first and discussed merge-blocking and release-blocking tests, many of which were failing due to infrastructure issues or buggy test code.

The subproject launched weekly hour-long meetings to discuss ongoing work discussion and triage.

June 2020. Morgan Bauer, Karan Goel, and Jorge Alarcon Ochoa were recognized as reviewers for the SIG Node CI group for their contributions, helping significantly with the early stages of the subproject. David Porter and Roy Yang also joined the SIG test failures GitHub team.

August 2020. All merge-blocking and release-blocking tests were passing, with some flakes. However, only 42% of all SIG Node test jobs were green, as there were many flakes and failing tests.

October 2020. Amim Knabben becomes a Kubernetes org member for his contributions to the subproject.

January 2021. With healthy presubmit and critical periodic jobs passing, the subproject discussed its goal for cleaning up the rest of periodic tests and ensuring they passed without flakes.

Elana Hashman joined the subproject, stepping up to help lead it after Victor's departure.

February 2021. Artyom Lukianov becomes a Kubernetes org member for his contributions to the subproject.

August 2021. After SIG Node successfully ran a bug scrub to clean up its bug backlog, the scope of the meeting was extended to include bug triage to increase overall reliability, anticipating issues before they affect the CI signal.

Subproject leads Elana Hashman and Sergey Kanzhelev are both recognized as approvers on all node test code, supported by SIG Node and SIG Testing.

September 2021. After significant deflaking progress with serial tests in the 1.22 release spearheaded by Francesco Romani, the subproject set a goal for getting the serial job fully passing by the 1.23 release date.

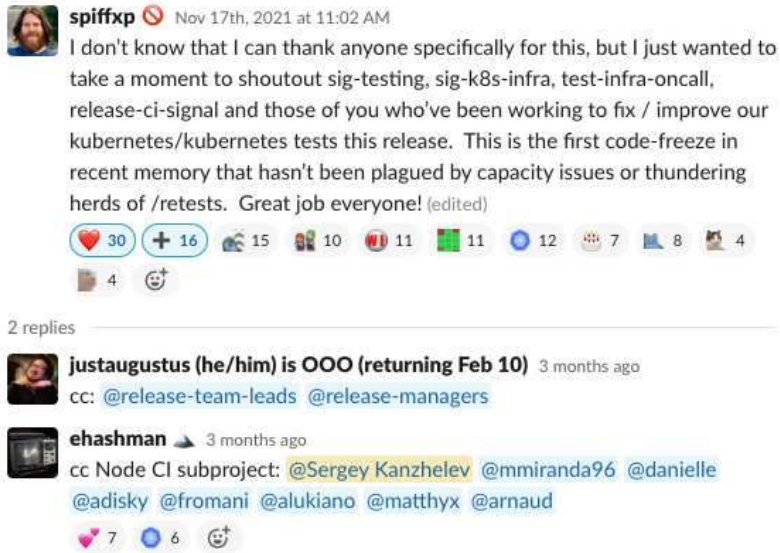
Mike Miranda becomes a Kubernetes org member for his contributions to the subproject.

November 2021. Throughout 2021, SIG Node had no merge or release-blocking test failures. Many flaky tests from past releases are removed from release-blocking dashboards as they had been fully cleaned up.

Danielle Lancashire was recognized as a reviewer for SIG Node's subgroup, test code.

The final node serial tests were completely fixed. The serial tests consist of many disruptive and slow tests which tend to be flakey and are hard to troubleshoot. By the 1.23 release freeze, the last serial tests were fixed and the job was passing without flakes.

The 1.23 release got a special shout out for the tests quality and CI signal. The SIG Node CI subproject was proud to have helped contribute to such a high-quality release, in part due to our efforts in identifying and fixing flakes in Node and beyond.



December 2021. An estimated 90% of test jobs were passing at the time of the 1.23 release (up from 42% in August 2020).

Dockershim code was removed from Kubernetes. This affected nearly half of SIG Node's test jobs and the SIG Node CI subproject reacted quickly and retargeted all the tests. SIG Node was the first SIG to complete test migrations off dockershim, providing examples for other affected SIGs. The vast majority of new jobs passed at the time of introduction without further fixes required. The effort of removing dockershim) from Kubernetes is ongoing. There are still some wrinkles from the dockershim removal as we uncover more dependencies on dockershim, but we plan to stabilize all test jobs by the 1.24 release.

Statistics

Our regular meeting attendees and subproject participants for the past few months:

- Aditi Sharma
- Artyom Lukianov
- Arnaud Meukam
- Danielle Lancashire
- David Porter
- Davanum Srinivas
- Elana Hashman
- Francesco Romani
- Matthias Bertschy
- Mike Miranda
- Paco Xu
- Peter Hunt
- Ruiwen Zhao
- Ryan Phillips
- Sergey Kanzhelev
- Skyler Clark
- Swati Sehgal
- Wenjun Wu

The kubernetes/test-infra source code repository contains test definitions. The number of Node PRs just in that repository:

- 2020 PRs (since May): 183
- 2021 PRs: 264

Triaged issues and PRs on CI board (including triaging away from the subgroup scope):

- 2020 (since May): 132
- 2021: 532

Future

Just "keeping the lights on" is a bold task and we are committed to improving this experience. We are working to simplify the triage and review processes for SIG Node.

Specifically, we are working on better test organization, naming, and tracking:

- https://github.com/kubernetes/enhancements/pull/3042
- https://github.com/kubernetes/test-infra/issues/24641
- Kubernetes SIG-Node CI Testgrid Tracker

We are also constantly making progress on improved tests debuggability and de-flaking.

If any of this interests you, we'd love for you to join us! There's plenty to learn in debugging test failures, and it will help you gain familiarity with the code that SIG Node maintains.

You can always find information about the group on the SIG Node page. We give group updates at our maintainer track sessions, such as KubeCon + CloudNativeCon Europe 2021 and KubeCon + CloudNative North America 2021. Join us in our mission to keep the kubelet and other SIG Node components reliable and ensure smooth and uneventful releases!

← Previous

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Contributing to Kubernetes blogs

Contributing to Kubernetes blogs

There are two official Kubernetes blogs, and the CNCF has its own blog where you can cover Kubernetes too. For the main Kubernetes blog, we (the Kubernetes project) like to publish articles with different perspectives and special focuses, that have a link to Kubernetes.

With only a few special case exceptions, we only publish content that hasn't been submitted or published anywhere else.

Read the blog guidelines for more about that aspect.

Official Kubernetes blogs

Main blog

The main Kubernetes blog is used by the project to communicate new features, community reports, and any news that might be relevant to the Kubernetes community. This includes end users and developers. Most of the blog's content is about things happening in the core project, but Kubernetes as a project encourages you to submit about things happening elsewhere in the ecosystem too!

Anyone can write a blog post and submit it for publication. With only a few special case exceptions, we only publish content that hasn't been submitted or published anywhere else.

Contributor blog

The Kubernetes contributor blog is aimed at an audience of people who work **on** Kubernetes more than people who work **with** Kubernetes. The Kubernetes project deliberately publishes some articles to both blogs.

Anyone can write a blog post and submit it for review.

Article updates and maintenance

The Kubernetes project does not maintain older articles for its blogs. This means that any published article more than one year old will normally **not** be eligible for issues or pull requests that ask for changes. To avoid establishing precedent, even technically correct pull requests are likely to be rejected.

However, there are exceptions like the following:

- (updates to) articles marked as evergreen
- removing or correcting articles giving advice that is now wrong and dangerous to follow
- fixes to ensure that an existing article still renders correctly

For any article that is over a year old and not marked as *evergreen*, the website automatically displays a notice that the content may be stale.

Evergreen articles

You can mark an article as evergreen by setting `evergreen: true` in the front matter.

We only mark blog articles as maintained (`evergreen: true` in front matter) if the Kubernetes project can commit to maintaining them indefinitely. Some blog articles absolutely merit this; for example, the release comms team always marks official release announcements as evergreen.

What's next

- Discover the official blogs:
  - Kubernetes blog
  - Kubernetes contributor blog
- Read about reviewing blog pull requests
- Submitting articles to Kubernetes blogs
- Blog guidelines
- Blog article mirroring
- Post-release communications
- Helping as a blog writing buddy

Feedback

Was this page helpful?

Yes No

Last modified March 13, 2025 at 10:41 AM PST: Add guide to blog contributions (815a75d025)

Exhibit E. The Petitioner’s participation, either individually or on a panel, as a judge of the work of others in the same or an allied field of specialization for which classification is sought

To Whom It May Concern:

This letter confirms that Amim Knabben served as an invited reviewer for both Istio Day North America 2024 and KubeCon + CloudNativeCon North America 2023. These events are organized by the Cloud Native Computing Foundation and are among the most significant gatherings within the cloud native and open source technology communities.

Istio Day North America 2024 is a specialized community event focused on the industry's most widely adopted service mesh. It brings together project maintainers, technical leaders, engineers, and researchers who work across the Istio ecosystem. Mr. Knabben was selected as a reviewer based on his recognized expertise.. As part of this role, he completed 48 session reviews during the review window of 17 to 30 July 2024. His work included detailed scoring and thoughtful written assessments that directly informed Program Chair's deliberations and acceptance decisions. All reviews were conducted voluntarily and in alignment with conflict of interest and code of conduct requirements.

Mr. Knabben also contributed as a reviewer for KubeCon + CloudNativeCon North America 2023, the flagship conference for adopters and technologists from key open source and cloud native communities. The event serves as the primary forum for contributors and end users from CNCF graduated, incubating, and sandbox projects, and it plays an important role in advancing education and collaboration across the cloud native landscape. For the 2023 program, Mr. Knabben reviewed 85 submissions for the ML/AI and Data, Processing, and Storage track. These reviews were completed during a two week period that concluded on 23 July 2023. His evaluations provided essential guidance to the Event Chairs as it worked to build a balanced, high quality agenda that reflected current trends and developments in the field. This work was also voluntary and conducted under standard reviewer expectations and guidelines.

Mr. Knabben's service as a program reviewer reflects both his specialized knowledge and his ongoing commitment to supporting the advancement of cloud native technologies within the global community.

If you need any additional information, please feel free to contact us.

Sincerely,
Cody Galloway
Content Manager
The Linux Foundation

2810 N Church St PMB 57274 | Wilmington, Delaware | 19802-4447 USA
TEL: +1 415 723 9709 | www.linuxfoundation.org

How the Program Committee is chosen

To create the Program Committee, CNCF invites contributors from the community to participate.

An email is sent to CNCF Maintainers and the CNCF Ambassadors inviting them to fill out the interest form. On occasion, the co-chairs will have specific individuals to invite, but the majority of the program committee comes from CNCF projects and ambassadors.

There are at least 5 program committee members assigned to each track/topic to review. The co-chairs assign them to each track.

On average, the Program Committee consists of:

- Europe: 90
- China: 60
- North America: 115
- Track Chairs Average: 30
- Keynote Sessions: 15–25

This badge was issued to Amim Knabben
Date issued: August 26, 2024

Verify | Celebrate

Program Committee Member: KubeCon + CloudNativeCon North America 2024

Issued by The Linux Foundation

Earners of this badge are subject matter experts selected by the KubeCon + CloudNativeCon North America 2024 Co-Chairs, who have lent their time and expertise alongside fellow program committee members to review and rate submitted speaking proposals, assisting in the selection of high-quality talks for the KubeCon + CloudNativeCon North America 2024 conference agenda. Learn more about KubeCon + CloudNativeCon North America at https://bit.ly/3PjN5c6

Learn more

Experience | Advanced | Years | Free

Skills

Subject Matter Expert In Open Source And Cloud Native...

Earning Criteria

- Ability to impartially review talks
- Successful completion of the program committee review process
- Provide useful input and guidance within the review process that results in the acceptance of high quality talks across a range of relevant topics to the target audience

Related

Co-Chair: KubeDay Singapore 2023

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This badge was issued to Amim Knabben
Date issued: February 09, 2024

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Program Committee Member: KubeCon + CloudNativeCon Europe 2024

Issued by The Linux Foundation

Earners of this badge are subject matter experts, selected by the KubeCon + CloudNativeCon Europe 2024 Co-Chairs, who have lent their time and expertise alongside fellow program committee members to review and rate submitted speaking proposals, assisting in the selection of high quality talks for the KubeCon + CloudNativeCon Europe 2024 conference agenda.

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Experience | Advanced | Years | Free

Skills

Subject Matter Expert In Open Source And Cloud Native...

Earning Criteria

- Ability to impartially review talks
- Successful completion of the program committee review process
- Provide useful input and guidance within the review process that results in the acceptance of high quality talks across a range of relevant topics to the target audience

Related

Co-Chair: KubeDay Singapore 2023

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This badge was issued to Amim Knabben
Date issued: October 18, 2024

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Program Committee Member: KubeCon + CloudNativeCon India 2024

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Earners of this badge are subject matter experts selected by the KubeCon + CloudNativeCon India 2024 Co-Chairs, who have lent their time and expertise alongside fellow program committee members to review and rate submitted speaking proposals, assisting in the selection of high-quality talks for the KubeCon + CloudNativeCon India 2024 conference agenda.

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Subject Matter Expert In Open Source And Cloud Native...

Earning Criteria

- Ability to impartially review talks
- Successful completion of the program committee review process
- Provide useful input and guidance within the review process that results in the acceptance of high quality talks across a range of relevant topics to the target audience

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This badge was issued to Amim Knabben
Date issued: September 09, 2024

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Istio Day NA 2024 Program Committee Member Badge

Issued by The Linux Foundation

Earners of this badge are subject matter experts, selected by Cloud Native Computing Foundation. They have lent their time and expertise, along with fellow program committee members, to review and rate submitted speaking proposals and to assist in selecting high-quality talks for the Istio Day North America 2024 conference agenda.

Learn more

Experience | Intermediate | Years | Free

Skills

Cloud-Native Computing Foundation (CNCF) Standards | Subject Matter Expert | Trusted Community Representative

Earning Criteria

- Ability to impartially review talks
- Successful completion of the program committee review process
- Provide useful input and guidance within the review process that results in the acceptance of high-quality talks across a range of relevant topics to the target audience

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This badge was issued to Amim Knabben
Date issued: March 27, 2024

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Organizer: 2024 KCD

Issued by The Linux Foundation

Earners of this badge are community members volunteering their time to execute a KCD event (Kubernetes Community Days). The earners have lent their expertise alongside fellow program committee members to organize logistics, and/or review and rate submitted speaking proposals, assisting in the selection of high quality content for their local KCD event.

Learn more

Experience | Advanced | Months | Free

Skills

Cloud Native | Collaboration Skills | community events | Content Management (CM) | Event Planning | Open Source | Trusted Community Leader

Earning Criteria

- Ability to provide a vendor-neutral, cloud native program of CNCF quality to their local community at a low cost.

Related

Program Committee Member: Kubernete...

Co-Chair: KubeDay Singapore 2023

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This badge was issued to Amim Knabben
Date issued: September 08, 2023

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Track Chair: KubeCon + CloudNativeCon North America 2023

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Earners of this badge are subject matter experts selected by the KubeCon + CloudNativeCon North America 2023 Co-Chairs, who have lent their time and expertise to further review proposals reviewed by the program committee and create short lists of talks from their assigned track to recommend for acceptance, assisting in the selection of high-quality talks for the KubeCon + CloudNativeCon North America 2023 agenda. Learn more about KubeCon + CloudNativeCon North America at https://bit.ly/3PjN5c6.

Learn more

Experience | Advanced | Years | Free

Skills

Subject Matter Expert In Open Source And Cloud Native... | Thought Leadership

Earning Criteria

- Ability to impartially review talks
- Successful completion of the track chair talk selection process
- Provide useful input and guidance to the co-chairs that results in the acceptance of high quality talks across a range of relevant topics to the target audience

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Speaker: KubeDay India 2023

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This badge was issued to Amim Knabben
Date issued: September 08, 2023

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Program Committee Member: KubeCon + CloudNativeCon North America 2023

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Earners of this badge are subject matter experts, selected by the KubeCon + CloudNativeCon North America 2023 Co-Chairs, who have lent their time and expertise alongside fellow program committee members to review and rate submitted speaking proposals, assisting in the selection of high quality talks for the KubeCon + CloudNativeCon North America 2023 conference agenda. Learn more about KubeCon + CloudNativeCon North America at https://bit.ly/3PjN5c6

Learn more

Experience | Advanced | Years | Free

Skills

Subject Matter Expert In Open Source And Cloud Native...

Earning Criteria

- Ability to impartially review talks
- Successful completion of the program committee review process
- Provide useful input and guidance within the review process that results in the acceptance of high quality talks across a range of relevant topics to the target audience

Related

Co-Chair: KubeDay Singapore 2023

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Speaker: KubeDay India 2023

Exhibit F. Original scientific, scholarly, artistic, athletic, or business-related contributions of major significance in the field

Contact

www.linkedin.com/in/jamessturtevant (LinkedIn)
channel9.msdn.com/Niners/jsturtevant (Personal)

Top Skills

Rust (Programming Language)
WebAssembly
Go (Programming Language)

Certifications

Microsoft Certified Solutions Developer - Web Applications
MS: Developing Microsoft Azure Solutions
OpenHack: DevSecOps
LFC101: Inclusive Speaker Orientation
OpenHack: Containers Coach

Honors-Awards

2013 Portland Maine Startup Weekend First Place Winner

James Sturtevant

Principal Software Engineering Lead at Microsoft
Greater Seattle Area

Summary

I am a passionate software developer and teacher.

My diverse background has allowed me to foster everything from interpersonal communication to precise analytic skills. Being a constant learner, I have the capacity to to be the student or the teacher (and many times both). Learn more about my journey in Developer on Fire podcast linked below.

In the past my passion for the outdoors has found me leading trips to the top snow covered peaks in Glacier National Park during winter months to leading trouble teenagers in the middle of Utah's high desert. Although I am currently pursuing my career as a Software Developer, you may find me out in the woods on the weekends when I am not fine tuning my software development skills.

Experience

Microsoft
10 years 10 months

Principal Software Engineer
June 2020 - Present (5 years 9 months)

Technical leader and innovator in cloud native technologies recognized for delivering strategic initiatives, cross-team collaboration, and mentoring.

- Tech Lead for Hyperlight Virtual Machine Manager (VMM)
- Co-Author on WASM OCI artifact specification in the CNCF Wasm working group
- Recognized Contributor in Bytecode Alliance and Wasm C# Subgroup lead working on integrations with wit-bindgen, componentize-dotnet and wasi-tls
- Contributor to wide variety of cloud-native projects including OpenServicemesh, containerd, nerdctl, Calico CNI, Prometheus exporter, Windows GMSA, and Kubernetes
- Kubernetes Sig-Windows Tech Lead (2020-2025)

Principal Software Development Engineer Lead
April 2019 - July 2020 (1 year 4 months)

Manager for a team that worked with high impact organizations using software engineering to deliver value by enabling them to achieve more by using Azure.

- Lead of a global team that was responsible for amplifying patterns and practices from direct partner engagement to empower internal and external audiences by creating reusable assets, making customer feedback actionable for our product groups, and driving improvements in our documentation.
- Built Azure metric adapter used in production by customers with 10's of thousands of downloads a day and inspired components of KEDA.
- Led the team that built the second version of Containers Openhack delivered to thousands of internal and external attendees

Senior Software Development Engineer
September 2017 - April 2019 (1 year 8 months)

Investigated emerging technologies aligned with strategic technical priorities while practicing software engineering with customers to validate readiness for broad adoption and sharing with the broader community.

- Developed white papers based on engineering engagements with customers which impacted the Azure product groups investments
- Led a team in initiative to bring Windows Containers support to GA in upstream Kubernetes by creating the first windows end to end tests and adding missing features across Kubernetes, aks-engine, and Azure CNI
- Identified patterns and developed programs to deepen skills for development of cloud native applications such as contributing to development and delivery of the first Containers OpenHack

Sr. Technical Evangelist
May 2015 - September 2017 (2 years 5 months)

I work with Developers, Students and Startups to help them build innovative applications using Microsoft's leading edge technology for a mobile first, cloud first world.

The best part of this job is empowering others to achieve great things. A few inspiring projects that I have been lucky to be a part of are:

- Urban Refuge - https://channel9.msdn.com/Shows/Microsoft-Technical-Case-Studies/Urban-Refuge
- Team Tactile - http://news.microsoft.com/stories/people/team-tactile.html

- CCHE -https://microsoft.github.io/techcasestudies/mobile%20application%20development%20with%20xamarin/2017/04/28/CCEH.html

See the attached media below for other projects I have worked on.

Pinnacle IT
Senior Developer
November 2012 - May 2015 (2 years 7 months)
Waterville, Maine

Software developer working in leading technologies. Responsible for designing and implementing modular systems using SOA in .NET.

PaperFree Corporation
Product Developer / IT Engineer
September 2009 - December 2012 (3 years 4 months)

Design, develop, test, and deploy complex web and client/server applications in .NET utilizing technologies including WCF, SQL Server, XML
Created Policy and Procedure to enhance version control
Administrator of subversion version control system, including training of employees
Designed platform testing suite for automated testing (using NUnit)
Lead on IT engagements which include requirement gathering, estimates, and design of document capturing solutions
Delivering large scale document capturing solutions acting as a liaison between engineering department and clients providing in-depth product knowledge and customer service

Glacier Guides and Montana Raft Company
Backpacking Guide
May 2008 - August 2011 (3 years 4 months)

Responsible for Planning, Organizing and Guiding multi-day backpacking trips in Glacier National Park
Responsible for Guiding and Planning single and multi-day river trips
Shared knowledge about the surrounding area (Geology, History, Flora, Fauna)
Managed safety, diverse needs of clients, and time constraints

Whitefish School District
Technology Specialist
December 2008 - May 2009 (6 months)

Designed, implemented and deployed database driven web application in ASP.NET to manage internal service requests

Installation, distribution, and maintenance of hardware and software for school district

Taught Adult Education Classes for Word, Excel, and Access

Wilderness Treatment Center

Wilderness Instructor

October 2007 - April 2008 (7 months)

Taught extended backpacking skills to chemically dependent young men

Plan, Organize, and Lead 16 day Winter Backpacking trips (8-10 people) into Lewis and Clark National Forest

Supervised patients during weekly recreation and work days

Red Cliff Ascent

Red Hands Coordinator

June 2006 - September 2007 (1 year 4 months)

Developed Mission and Curriculum

Organized, planned, and ran wilderness skills activities for Redhands

Taught fire making skills to challenging students and processed the benefits of the experience

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Education

University of Rhode Island

BS, Computer Engineering · (2002 - 2006)

James Sturtevant, Principal Software Engineering
Lead Principal Software Engineering Lead,
Microsoft SIG Windows Emeritus Tech Lead
linkedin.com/in/jamessturtevant

To USCIS,
January 18, 2026

My name is James Sturtevant, and I serve as the Principal Software Engineering Lead at Microsoft and as the SIG Windows Emeritus Tech Lead on the Kubernetes project. I am writing this letter to confirm the critical work that Mr. Amim Salum Knabben performed for Kubernetes and the Cloud Native Computing Foundation community. I have worked closely with Mr. Knabben in the SIG Windows group, the official group responsible for all integration, support, and development of Kubernetes functionality for the Windows server operating system, where he served as Technical Lead and, before that, as an active contributor and reviewer.

In 2021, Mr. Knabben worked as an active contributor and reviewer, and from November 2023 to May 2025, he served as Technical Lead for the group. In this capacity, he exercised strategic technical leadership over core projects that are publicly visible to the Kubernetes community and to organizations that rely on Windows workloads in Kubernetes environments.

Under his leadership, SIG Windows developed the Windows Operational Readiness Specification, which created the first standardized framework for certifying Windows nodes in Kubernetes. This milestone established a consistent method for validating whether a Windows cluster was ready for production and is now used by major cloud providers, including Amazon Web Services, Microsoft Azure, and Google Cloud, to validate their managed Kubernetes offerings. Companies in the Fortune 500 can certify hybrid Linux and Windows environments validated by SIG Windows, providing a consistent way to ensure compliance. This framework is implemented in official project repositories and is directly accessible to the global Kubernetes community.

Mr. Knabben also guided the modernization of the Windows service proxy architecture in the Kube Proxy Next Generation effort, initiating the migration of critical components to an out-of-tree model. This change enables independent release cycles for the Kubernetes core in a decoupled architecture. In addition, he contributed to modernizing the testing infrastructure for Windows nodes in Kubernetes and to developing SIG Windows Development Tools, which facilitate local development for contributors. These efforts are reflected in the Kubernetes project's public continuous integration and delivery systems, which run hundreds of automated test jobs around the clock to validate Windows-related components.

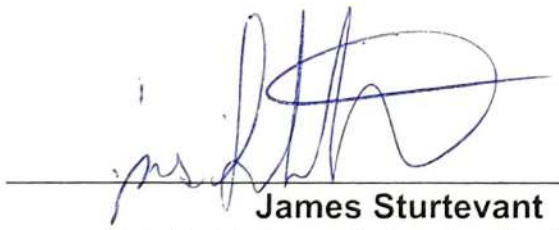
The work of Mr. Knabben has been repeatedly presented and documented at open, widely attended professional forums. He coauthored an official article on the Kubernetes website in April 2024 titled Introducing the Windows Operational Readiness Specification. According to the information available to us, this article reached tens of thousands of readers and serves as an official explanation of the framework he created. In addition, he gave a presentation on

Windows Operational Readiness at KubeCon plus CloudNativeCon North America 2022 in Detroit to an audience composed of thousands of professionals. He also gave a talk at CalicoCon 2022 on container networking interface (CNI) functionality in hybrid Windows and Linux clusters. These talks brought his work on Windows support in Kubernetes to a large number of practitioners in the cloud native ecosystem.

The broader context of the projects in which Mr. Knabben has contributed illustrates the visibility of his work. Kubernetes is used by more than 5.6 million developers worldwide, with 96% of organizations using or evaluating this technology according to the CNCF Survey 2023, and 75% of Fortune 100 companies run it in production. The Cloud Native Computing Foundation, which hosts Kubernetes among more than 200 projects, has over 1,000 member companies, including Google, Microsoft, Amazon, IBM, and Oracle. Its flagship conference, KubeCon, attracts more than 12,000 in-person participants. Within this environment, the work of SIG Windows, which Mr. Knabben helped lead, is critical for more than 70% of companies with legacy Windows workloads, especially in regulated sectors such as finance, health, and government that depend on Microsoft technology.

In summary, my direct professional experience with Amim Moises Salum Knabben confirms that his technical work on Windows support in Kubernetes has been presented and disseminated through official project infrastructure, public documentation, and conference talks to a broad professional audience. I support this statement and remain available to provide further information if required.

Sincerely,



James Sturtevant
Principal Software Engineering Lead, Microsoft

Contact

www.linkedin.com/in/luthermonson (LinkedIn)
luth.io (Blog)

Top Skills

PHP
MySQL
jQuery

Languages

English

Luther Monson

Lead Principal Engineer - LKE Enterprise
Tempe, Arizona, United States

Experience

Akamai Technologies
2 years 8 months

Lead Principal Software Engineer
July 2025 - Present (8 months)

Principal Engineer
July 2023 - September 2025 (2 years 3 months)
Tempe, Arizona, United States

Spectro Cloud
Software Architect
May 2022 - July 2023 (1 year 3 months)
Tempe, Arizona, United States

SUSE
Staff Software Engineer
January 2021 - May 2022 (1 year 5 months)
Tempe, Arizona, United States

Rancher Labs
Staff Software Engineer
March 2019 - January 2021 (1 year 11 months)
Tempe, AZ

RevolutionParts, Inc.
Staff Software Engineer
November 2017 - March 2019 (1 year 5 months)
Phoenix, Arizona Area

ThisLife by Shutterfly
Senior Software Engineer
June 2015 - November 2017 (2 years 6 months)
Tempe, AZ

Under the hood backend API developer on ThisLife, a free photo storage and sharing service provided by Shutterfly, Inc.

SheKnows Media
Senior Software Engineer
December 2012 - June 2015 (2 years 7 months)
Scottsdale, AZ

Responsible for SheKnows Explorer, a traffic exchange platform which provided an easy way for SheKnows to share traffic between web their properties and partner sites.

Discover MINE Ltd
Web Guru
January 2011 - December 2012 (2 years)

Child and Family Support Services, Inc
Senior Web Developer
September 2009 - January 2011 (1 year 5 months)

Village Voice Media
Web Developer
July 2006 - September 2009 (3 years 3 months)

Unicon
UE Developer
July 2005 - July 2006 (1 year 1 month)

Education

Gustavus Adolphus College
Bachelor's Degree, Computer Science · (2000 - 2004)

January 21st, 2026

To the USCIS Immigration Officer,

My name is Luther Monson, and I serve as a Lead Principal Engineer at Akamai Technologies, Inc. I am writing this letter in support of Amim Salum Knabben. In my role at Akamai Technologies, Inc, I have closely followed the evolution of Windows support in Kubernetes and the work of the Kubernetes SIG Windows community, including Mr. Knabben's contributions to the Windows Operational Readiness Specification.

Mr. Knabben's leadership in creating the Windows Operational Readiness Specification and the related Kubernetes Enhancement Proposal (KEP-2578) is significant. This proposal, titled "Windows Operational Readiness Specification," was officially merged into the kubernetes/enhancements repository in January 2022, becoming part of the Kubernetes v1.24 milestone. Since Windows support in Kubernetes became stable in 2019, the ability to run Windows workloads reliably has been highly valued. However, the increasing migration of Windows workloads and the continuous release of new Windows features made standardized testing of Windows worker nodes challenging.

The SIG Windows community faced concrete issues, including load balancer source address ranges not functioning correctly on Windows nodes, GMSA issues with containerd, and difficulties developing Network Policy tests for Container Network Interface (CNI) plugins across different operating systems. Existing Kubernetes conformance tests were originally Linux-centric and not easily extensible for Windows. Given that Windows workloads, despite their importance, represent a smaller portion of the Kubernetes community, it was crucial to avoid burdening the primary Linux conformance suite with Windows-specific features.

Mr. Knabben's work on the Windows Operational Readiness Specification provided a structured and practical solution to these challenges. He helped define a dedicated Go application that enables users to run Windows-specific tests and obtain precise results. The specification introduces a structured test suite, divided into core and extended sets, with categories targeting specific areas such as networking, storage, scheduling, concurrency, Windows HostProcess pods, Active Directory, Network Policy, advanced networking (e.g., IPv6), and Windows worker node functionality. These nine test categories collectively cover both minimal and advanced features essential for real-world Windows workloads on Kubernetes.

This contribution has had a concrete impact on organizations that operate or distribute Kubernetes. The specification enhances quality and standardization through its nine structured test categories for Windows functionality. It addresses false positives and negatives by requiring a webhook for scheduling tests exclusively on Windows nodes. Test coverage spans basic functionality, such as pod-to-pod networking and hostPath storage, to advanced capabilities, including IPv6, Active Directory integration, Network Policy enforcement, and HostProcess containers.

The Windows Operational Readiness application also significantly reduces the time and complexity for Windows users to validate their clusters. Previously, compiling and executing the full Kubernetes

end-to-end test suite was undesirable, and applying Linux-oriented conformance tests to Windows nodes was cumbersome. The new application offers a user-friendly, "push-button" solution. It generates detailed JUnit reports, including test execution summaries (passed, failed, skipped), specific logs for failed tests, node and pod health status, and error/warning detection in system logs. This facilitates rapid and accurate problem identification in Windows environments.

Furthermore, Mr. Knabben's contribution is widely adopted and documented. KEP-2578 was approved and merged, and the specification is officially hosted in the kubernetes-sigs/windows-operational-readiness repository, maintained by SIG Windows under the Cloud Native Computing Foundation. The work is detailed in the official Kubernetes blog post "Introducing the Windows Operational Readiness Specification," co-authored by Mr. Knabben, Jay Vyas, and Tatenda Zifudzi, published on April 3, 2024. In March 2024, Mr. Knabben integrated the specification into the troubleshooting section of the official Kubernetes documentation, further embedding it into the core resources for Kubernetes operators.

The contribution has also garnered broader recognition. It is an open-source project under the Apache 2.0 license, promoting commercial use, modification, and distribution. It is integrated into Kubernetes continuous integration and delivery workflows, allowing contributors to trigger Windows Operational Readiness tests via a dedicated bot command. Cloud providers can upload conformance results, enhancing transparency and reliability. These facts confirm that Mr. Knabben's authorship in this area extends beyond theoretical proposals, as it is actively used, referenced, and extended by numerous organizations and vendors.

As someone involved with commercial Kubernetes distributions, I have observed the direct relevance of this specification. Distributions like RKE2 have proactively implemented this specification, even before its final approval, underscoring its value as a consolidated reference for Windows conformance. My organization's public comments indicated our proactive implementation of this specification on the RKE2 side, awaiting the official KEP merge for complete consolidation before committing further resources. This demonstrates Mr. Knabben's work is directly incorporated into operational practices and vendor offerings.

I fully support this petition and remain available for any clarification that may be required.

Sincerely,

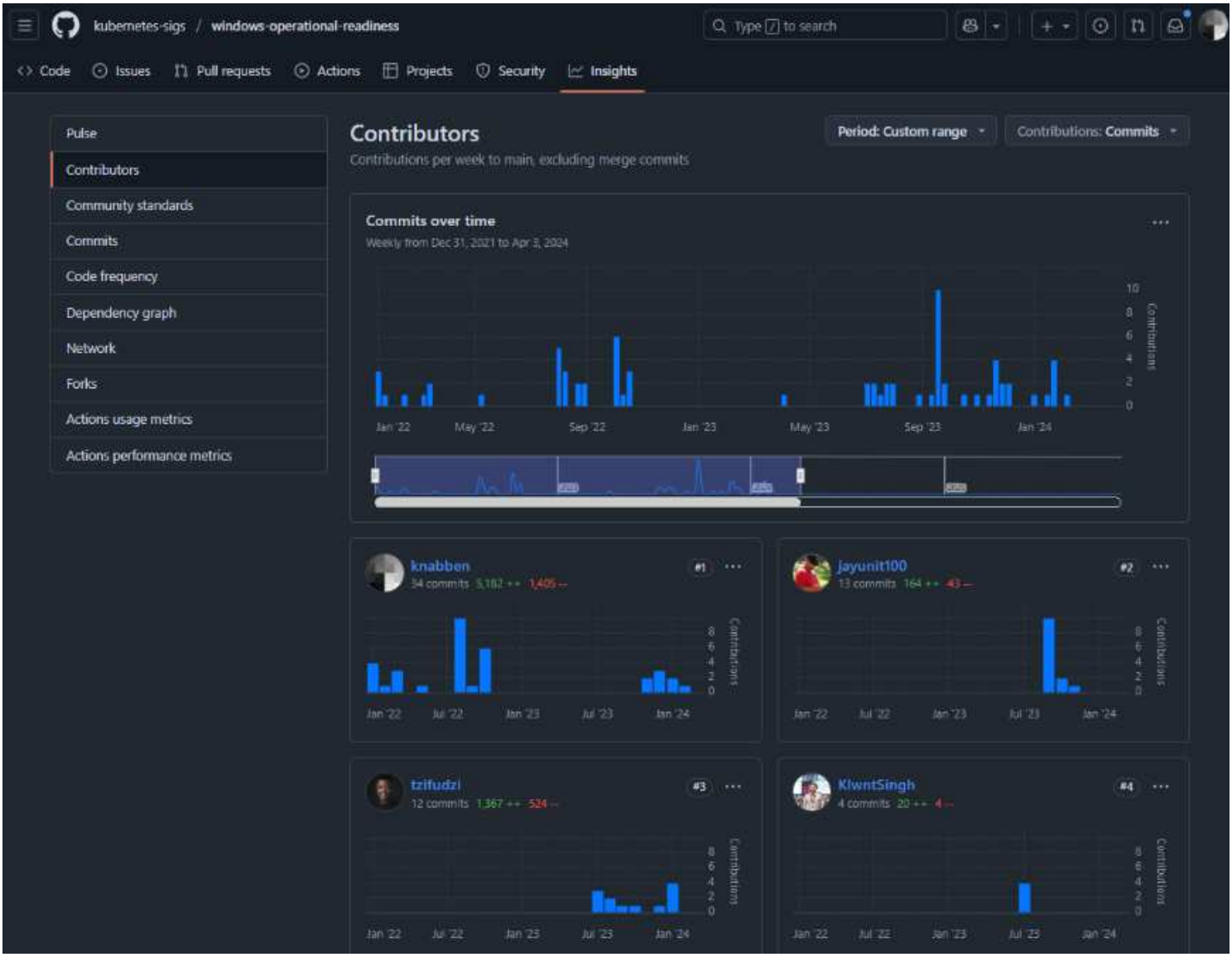
Luther Monson
Akamai Technologies, Inc

8824 S Poplar St
Tempe, AZ 85284
luther.monson@gmail.com
480-209-3415

Validating the Windows cluster operability

The Kubernetes project provides a *Windows Operational Readiness* specification, accompanied by a structured test suite. This suite is split into two sets of tests, core and extended, each containing categories aimed at testing specific areas. It can be used to validate all the functionalities of a Windows and hybrid system (mixed with Linux nodes) with full coverage.

To set up the project on a newly created cluster, refer to the instructions in the project guide.


kubernetes-sigs / windows-operational-readiness
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Issues
Pull requests
Actions
Projects
Security
Insights
Pulse
Contributors
Community standards
Commits
Code frequency
Dependency graph
Network
Forks
Actions usage metrics
Actions performance metrics
Contributors
Contributions per week to main, excluding merge commits
Period: Custom range
Contributions: Commits
Commits over time
Weekly from Dec 31, 2021 to Apr 3, 2024
Contributions
Jan '22
May '22
Sep '22
Jan '23
May '23
Sep '23
Jan '24
knabben
34 commits 5,182 ++ 1,405 --
#1
jayunit100
13 commits 164 ++ 43 --
#2
tzifudzi
12 commits 1,367 ++ 524 --
#3
KlwntSingh
4 commits 20 ++ 4 --
#4
Jul '22
Jan '23
Jul '23

Contact

www.linkedin.com/in/edksummers (LinkedIn)

Top Skills

Product Development
Product Management
Project Management

Languages

English (Native or Bilingual)

Certifications

Engineer In Training

Edward S.

Product @Cedar | ex-Lyft, ex-Upstart
New York, New York, United States

Summary

Product manager with experience at the intersection of ecommerce, and operations. I focus on delivering value for customers while driving improvement in business outcomes.

I have extensive experience working in startups and small businesses. Able to easily work with changing circumstances, ambiguity, tight timelines and shoestring budgets.

Experience

Cedar
Senior Product Manager
September 2025 - Present (5 months)
New York City Metropolitan Area

Drive the development of Cedar Pay's patient billing experience by helping people understand what they owe in the context of their coverage and guiding them to personalized, affordable payment options that improve collections for providers.

Upstart
Senior Product Manager
2023 - 2025 (2 years)
New York City Metropolitan Area

Developed solutions for deeply delinquent and defaulted borrowers.

Scaled the use of debt settlements, launched new collection channels, and enabled a 3x expansion in third-party collection vendors. Leveraged machine learning to deliver more personalized, flexible borrower experiences. Reduced losses by $xxM+ while significantly improving operational efficiency.

Lyft
Group Product Manager
2022 - 2023 (1 year)
New York, New York, United States

Led product for software to manage a fleet of 12,000+ rideshare rental vehicles, used by Lyft's most productive drivers.

Focused on improving efficiency and financial outcomes at the beginning and end of the vehicle lifecycle. Consolidated a highly manual vehicle sale process from 6+ spreadsheets into one tool, reducing proceeds forecast error by ~60% and identifying $x.xM+ in savings by surfacing high-cost vehicles to sell early.

Also, re-evaluated plans to sell Lyft's fleet management software as a SaaS product—updated go-to-market and engineering investment plans, and presented a decision recommendation to senior executives.

Loadsmart

4 years

Group Product Manager

2021 - 2022 (1 year)

Greater New York City Area

Led a team of 4 product managers to deliver SaaS and logistics service offerings that helped shippers expand their network of trucking partners and reduce freight costs.

Scaled a freight procurement product from small-business beta to enterprise-ready solution, increasing subscription pricing from hundreds to tens of thousands of dollars per year. Expanded offering to support end-to-end freight management, from securing truck capacity to tracking on-time delivery.

Led strategy and roadmap for a quoting product serving non-API shippers, growing monthly revenue 6x (from $500K to $3M+) and cutting onboarding time by 90% through automation of email-based freight quotes.

Senior Product Manager

2018 - 2021 (3 years)

Greater New York City Area

Launched and scaled Loadsmart's first port trucking business, building both the technology and operations. Launched a new port trucking freight brokerage, growing revenue 300% YoY and expanding from 1 to 7 port terminals in the first year.

Led strategy and development of a machine learning–powered service to optimize container pickups, reducing truck wait times by up to 33% and cutting

port operating costs. Gained buy-in from port operators and scaled pilot 5x to 180 containers/week in 4 weeks.

Negotiated a strategic partnership with a top ocean carrier, establishing Loadsmart as their preferred port trucking broker. The deal increase market credibility and helped unlock investment from institutional backers.

Shapeways

5 years

Product Manager

2017 - 2018 (1 year)

Greater New York City Area

PM for manufacturing ERP and core upload-quote-print customer experience. Led overhaul of core experience, improving conversion by 10% by simplifying the flow and pricing formula. Decreased overall time to convert by 60%.

Led repricing effort resulting in x0% increase in overall gross margins, by better aligning with competitor pricing and production costs. A/B tested price updates with new users to ensure limited to no impact on conversion. 85% of models predicted to receive a net price reduction.

Launched model repair services for models not printable after purchase with 90% uptake during the pilot program. Integrated with core customer experience and expanded to repair about x00 models/week.

Industrial Engineering Lead

2016 - 2017 (1 year)

Queens, NY

Led a team of 2 direct reports focused on continuous improvement and automation of 3D printing post-production. Led a $400K+ facility and HVAC upgrade delivered on budget with minimal change orders (<2%), managing C-level and external stakeholders throughout planning, design and construction.

Industrial Engineer

2013 - 2016 (3 years)

Queens, NY

Drove scalability and efficiency in a rapidly growing manufacturing facility. Key outcomes included standardizing labor planning across production, collaborating with the software product team to enhance our ERP system—yielding a projected $400K in annual savings—and designing custom post-processing equipment that reduced a key bottleneck step by 60%.

Self-Employed
Property Manager
2010 - 2018 (8 years)

Property manger for two small family-owned rental real estate businesses.

Massachusetts Institute of Technology
Research Assistant - Dept. of Mechanical Engineering
2008 - 2013 (5 years)
Cambridge, MA

Research assistant who worked on a variety of macro-scale thermal systems with applications in energy, water purification and medical devices. Work presented at outside conferences and published in numerous peer-reviewed articles (including 2 with international partners). 1 granted patent.

PhD thesis work: Development of Energy Efficient Membrane Desalination Systems

Other Select Projects:

Whole Organ Cooling Device for Minimally Invasive Surgery
✦ Designed, refined, and iteratively tested the device using a custom-built thermal environment and in-situ trials
✦ Engaged with clinical end-users; including surgical observations, interviews, and interactive testing of prototypes
✦ Presented work to clinicians and medical device manufacturers for potential technology sale

Design of a High Temperature Solar Air Heater with Latent Heat Energy Storage
✦ Designed collector to provide 24 hour heating using ADINA CFD and built an experiment to verify performance

FINsix Corporation
Mechanical Engineering Consultant
2012 - 2012 (less than a year)
Boston, MA

As a contract engineer I designed cooling solutions for a novel LED light bulb power supply with a focus on simplicity and cost in for technology demonstrations and end use applications.

Schlumberger
Research Assistant
June 2008 - August 2008 (3 months)
Cambridge, MA

Development of non-newtonian fluid carrier for well measurement components.

Shell Global Solutions
Mechanical Engineering Intern
June 2007 - August 2007 (3 months)
Houston, TX

Conducted thermal-structural analysis of critical refinery components.

Millipore
Product Development Intern
June 2006 - January 2007 (8 months)
Danvers, MA

Developed critical fluid handling components for a new life science product to enhance the speed and efficacy of the western blotting process

Education

Massachusetts Institute of Technology
PhD, Mechanical Engineering

Massachusetts Institute of Technology
Bachelor of Science, Mechanical Engineering

Product School
Software Product Management (SPM®) Certificate

January 25, 2026

To USCIS,

I respectfully submit this letter in support of Mr. Amim Moises Salum Knabben and his petition for EB-1A classification as an individual of extraordinary ability. My recommendation is based on direct professional collaboration and firsthand knowledge of his technical leadership and contributions. My name is Edward Summers, and I serve as a Senior Product Manager. I had the privilege of working directly with Mr. Knabben during my tenure at Loadsmart, where he served as Lead Backend Engineer. In this capacity, I witnessed firsthand his outstanding technical leadership and his profound impact on the company's core offerings.

Mr. Kanbben was instrumental in the architecture and development of Loadsmart's primary Full Truckload (FTL) Transportation Management System, specifically integrating it with Container Port Drayage operations. This initiative addressed critical inefficiencies in the North American drayage market, a sector valued at over $50 billion annually and involving more than 60 million movements. This promptly addressed the industry's challenges, including excessive wait times for truck drivers at port terminals, a lack of real-time data integration, and the need for excessive "container shuffling" to access specific containers, leading to substantial waste, estimated at 15 million man-hours and 150 million gallons of fuel annually.

Mr. Knabben's solution introduced a "free-flow" model, shifting the industry from a container-specific to a container-agnostic approach. Called Smart Drayage, this innovative system allows truck drivers to receive the most accessible container upon arrival at the port, significantly reducing turnaround times by 10-30%. He designed a distributed systems architecture focused on horizontal scalability to support exponential growth and defined integration strategies with external systems, such as port terminal APIs and carrier Transportation Management Systems . His technical leadership, which included establishing documentation standards and development practices, and conducting code and design reviews, ensured the system's quality and maintainability.

This program utilizes an API that synchronizes with port terminal operating systems, matching containers with trucks based on ease of access, loading times, and intended destination. This data is then made available to truck drivers via a mobile application, enabling real-time load booking. On the backend, Smart Drayage uses real-time container location, stack position, and equipment availability to identify the easiest container to retrieve, connecting truckers to containers that minimize reshuffles and yard rehandling.

The impact of Mr. Knabben's contribution has been widely recognized and adopted by major players in the logistics and shipping industry and was foundational to the launch of "Maersk Transportation", a port trucking procurement solution, in 2019, powered by Loadsmart's technology. This was the first such partnership between Maersk and an early-stage startup. Maersk, the world's largest container carrier, moves approximately 12 million containers annually, representing about 15% of the global market. Smart Drayage was launched in partnership with Ports America. Ports America operates 33 port terminals across 22 U.S. cities, handling around 35% of container volume moving into the U.S. . The initiative was initially launched at Port Newark in New Jersey in February 2020.

The significance of his contribution is further evidenced by substantial institutional investment. Loadsmart announced a $90 million Series C funding round in November 2020

led by BlackRock, Inc.'s managed funds, and including prominent strategic investors such as TFI International Inc., as well as continued participation from Maersk. This followed a $21.6 million Series A round in October 2018, led by Maersk Growth, and an additional $19 million in funding in 2019 for the Smart Drayage initiative from Ports America and Maersk. This total funding exceeding $130 million demonstrates strong institutional validation of the technical and commercial impact of the system Mr. Knabben helped develop.

The announcement of the Series C funding also received coverage in top tier media outlets such as the Wall Street Journal, FreightWaves, TechCrunch, and VentureBeat, underscoring the broad recognition of the innovation. Leaders from Maersk and Ports America have publicly praised the initiative, with Sune Stilling, Head of Growth at Maersk, noting that Loadsmart "From the onset, we recognized the synergies between Maersk and Loadsmart and our joint opportunity to drive change through technology. Our partnership will increase inland business opportunities to add value to our clients." Mark Montgomery, President and CEO of Ports America, stated that "Streamlining the movement of drayage benefits our trucking community with faster turnaround times while providing cargo owners better visibility."

For these reasons, I fully support Mr. Amim Moises Salum Knabben in his petition and remain available should you require further information.

Sincerely,

Edward Summers

Senior Product Manager
Cedar
ed.k.summers@gmail.com

[NEWS] Loadsmart Announces $19 Million Investment for Major Drayage Initiative with Maersk and Ports America

by admin

The largest U.S. port operator joins Maersk as a Loadsmart investor

New York, NY—Loadsmart, a digital freight technology company, today announced they have raised $19 million to embark on a major initiative to improve the flow of freight through American ports. Ports America, the largest terminal operator and stevedore in the U.S., joins the world's largest container ship and supply vessel operator's investment arm Maersk Growth as an investor. This latest round follows Loadsmart's series A round in late 2018, bringing total funding to date to $53.3 million.

model to accelerate the transit of goods through the largest ports in America.

"The free-flow model moves the industry from container-specific to container-agnostic. It means that truck drivers will be given the best container available when they arrive at the port, having pre-agreed with a specific mileage band trip" said Ricardo Salgado, CEO and co-founder of Loadsmart. "As a result, we project that truck drivers will be able to reduce their time to get in and out of the port by at least 25%. At the same time, we estimate that port operators will be able to reduce container shuffles by at least 50%, which is a huge efficiency gain."

Recent Freightwaves research shows that there are more than 60 million drayage movements each year in North America, representing a $50 billion plus market with ports contributing 26 percent to the U.S. gross domestic product. Yet, due to lack of efficiency and transparency, 15 million man-hours and 2.3 billion gallons of fuel are wasted due to trucker congestion at ports.

Maersk alone moves around 13 million containers a year, or around 15% of the world's container market. Ports America operates 33 port terminals in 22 cities in the U.S. and moves around 6.7 million containers in and out of the country.

"At Maersk Growth we want to define the future of trade," said Sune Stilling, head of Maersk Growth. "From the onset, we recognized the synergies between Maersk and Loadsmart and our joint opportunity to drive change through technology. Our partnership will increase inland business opportunities to add value to our clients."

"As the only tri-coastal terminal operator, we are focused on providing value to supply chains through transparent and efficient terminal operations and in our pursuit to provide our customers with best-in-class service, we need to rethink how goods are moved more efficiently. Streamlining the drayage movement benefits our trucking community with faster turn times while providing cargo owners with better visibility and more efficient container retrievals" said Mark Montgomery, President and CEO, Ports America. "

The announcement comes together with the release of Loadsmart Drayage Instant Booking. The new service is available via Loadsmart's website and enables small and medium sized shippers to book a drayage truck in seconds. For enterprise accounts Loadsmart offers an API integrated solution.

Aside from Ports America and Maersk Growth, Chromo and Connor Capital (who also took part in the firm's Series A funding last October) participated in this intermodal-focused investment, bringing the total investment in Loadsmart to date to $53.4 million.

"The addition of drayage to our established expertise in truckload services allows Loadsmart to provide integrated logistics services through technology. Our goal is to offer shippers of all sizes access to a fully integrated, seamless multi-modal end-to-end experience," said Felipe Capella, chief product officer and co-founder, Loadsmart.

Share this

"Chromo is here for the long haul. We are fully supportive of Loadsmart's executive team in their technology-first approach, which will now become the standard for drayage as well," said Marcelo Ferreira, managing partner, Chromo.

integrated way," said Josh Connor, managing partner, Connor Capital.

LEARN MORE ABOUT SMART DRAYAGE

About Loadsmart

Loadsmart is a digital freight platform that specializes in truckload and intermodal shipping. Loadsmart is leveraging data and machine learning to build artificial intelligence processes into the complex freight cycle, allowing shippers to book a truck in seconds and providing instant and targeted loads to carriers. https://loadsmart.com

Topics: News | Our Partners | Mode Optimization

Loadsmart's Look Ahead: An Analysis of Key Freight & Economic Indicators to Watch in January 2026

Loadsmart's Look Ahead: An Analysis of Key Freight & Economic Indicators to Watch in December 2025

Loadsmart's Look Ahead: An Analysis of Key Freight & Economic Indicators to Watch in November 2025

loadsmart

Loadsmart is on a mission to transform the future of freight.
We combine cutting edge technology with deep industry expertise to fundamentally change how freight is priced, booked and shipped.

SHIPPERS

- Shipper Solutions
- Managed Transportation
- ShipperGuide TMS
- Private Fleet Optimizer
- Flatbed messenger

CARRIERS

- Carrier Solutions
- Carrier Loadboard
- Carrier TMS
- Factoring
- Apps for iOS
- Apps for Android

DOCKS & YARDS

- Warehouse Solutions
- Dock Scheduling
- Yard and Asset Visibility

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https://www.wsj.com/articles/maersk-invests-in-freight-booking-startup-loadsmart-1539077400

BUSINESS | LOGISTICS REPORT | WSJ LOGISTICS REPORT

Maersk Invests in Freight-Booking Startup Loadsmart

Maersk's venture investment arm is part of a $21.6 million funding round in the New York startup

By Erica E. Phillips
Follow

Oct. 9, 2018 5:30 am ET

A.P. Moeller-Maersk A/S is investing in U.S. freight-booking startup Loadsmart Inc. as the container shipping giant works to extend its services beyond maritime transportation.

Maersk's venture investment arm is leading a $21.6 million Series A funding round for Loadsmart, together with Connor Capital SB and Chromo Invest. Maersk said its stake in the New York-based company provides "huge potential" for integrating its ocean-shipping services with Loadsmart's trucking technology.

SUPPLYCHAINDIVE

DIVE BRIEF

Maersk, Ports America invest $19M in Loadsmart Smart Drayage initiative

Published Sept. 6, 2019

Morgan Forde
Associate Editor

Dive Brief:

- Container shipping and logistics startup Loadsmart received $19 million in funding from Maersk Growth and Ports America, the country's largest port operator to support its Smart Drayage initiative, the company announced in a press release this week. The program uses an API that syncs with a port terminal's operating system, matching containers with trucks based on ease of access, load times, haul distances and other factors. This data is then made available to truckers via a mobile app that enables them to book loads in real time.

- On the back end, Smart Drayage gives ports a view of where containers are not only geographically in the terminal, but vertically in the stacks, Ricardo Salgado, CEO and co-founder of Loadsmart, told Supply Chain Dive in an interview. This way, the API can automatically connect truckers with the more easily accessible containers at the top of a stack, for example, removing the need for port operators to unstack and restack them to find a specific container.
- The initiative launched at the Port Newark container terminal in New Jersey in April 2019 where Loadsmart is working with a pilot batch of Maersk containers (among other carriers). Salgado hopes Smart Drayage can reduce time for trucks to enter and exit the port by 25% and reduce container shuffles by up to 50%. The company has plans to expand to one other port in Q4 and to at least two in Q1 2020, though Salgado declined to name specific locations.

Dive Insight:

The digital freight brokerage and logistics market has gotten increasingly crowded over the years, now including services offered by Amazon, Convoy, NEXT Trucking, Uber and others. Loadsmart sees its focus on drayage as a particular value-add as the industry has begun to warm up to digitalization.

Currently, wait times and traffic at ports are major problems for ports and truckers, who may eat up valuable hours-of-service time waiting in line for a container. According to research by NEXT Trucking, which uses a relay-based approach where trucks coordinate picking up and dropping off containers in a single trip, drayage delays can cost the industry up to $350 million annually.

“Customers want delivery instantly, for free, seamlessly, and with visibility,” Salgado told Supply Chain Dive. “Without having data visibility it is difficult to go out there and do that.” As a result, he said more ports are investing in the transition from “focusing on the desktop” to thinking about how to better leverage cloud and automation technologies to stay competitive.

Because Smart Drayage is an API tool, it requires a port to have an existing ERP or digital system with which it can integrate to pull data. So for ports looking to make the jump to smart technologies, Salgado said, transitioning from static databases or Excel sheets to an SAP or Oracle system can be the first step in bridging that gap. “Mobility is table stakes nowadays,” Salgado said, ”so this is part of that journey to optimize the flow of drayage.”

Loadsmart has raised $53.4 million in capital to date, according to the release. Salgado noted that Maersk also led the company’s earlier funding round, raising $21.6 million in October 2018. The

move is in line with the carrier's increased interest in freight logistics startups in recent years, funded through its Growth Ventures arm.

"We really like their thinking and ambition to re-engineer the long-standing inefficient industry practices," Betty Liu operating partner at Maersk Growth told Supply Chain Dive via email. "The smart drayage product will fix today's siloed processes as they exist today and be capable of integrating with future autonomous truck or automated terminal operations."

Maersk Growth recently announced it is establishing a new digital freight booking platform with one of India's largest online freight marketplaces, Blackbuck. The goal of the partnership is to reduce costs, open up visibility and reduce transit times for ocean and trucking freight connections in the country.

The Launch of 'Maersk Transportation' Marks a Key Milestone for Closer Collaboration With Startups

A.P. Moller — Maersk now makes booking full-truckload shipments in North America simple and convenient with the launch of Maersk Transportation.

Betty Yan Liu Follow 3 min read · Aug 30, 2019

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With Maersk Transportation, Maersk is redefining the last-mile delivery of goods by offering customers instant quotes and on-demand booking for full 53-foot dry van truckload shipping on any lanes using the web platform or mobile application.

Maersk Transportation also provides customers with full visibility on their cargo from pick-up to delivery with real-time track and trace capability.

Adoption of the new platform is expected particularly among small- and medium-sized enterprises, as it offers them faster, reliable, and straightforward access to the fragmented market of freight companies and brokers.

> *"The unveiling of Maersk Transportation marks an exciting and important milestone on our roadmap to becoming the global integrator of container logistics. This technology-enabled solution is designed to allow us to truly deliver customer cargo end-to-end, further expanding our Logistics and Services footprint," says Matthew Koivisto, Head of Transportation for NAM.*

"The unveiling of Maersk Transportation marks an exciting and important milestone on our roadmap to becoming the global integrator of container logistics."
— Matthew Koivisto, Head of Transportation for NAM

How it works

Users can access Maersk Transportation at www.maersktransportation.com. They only need to sign up to get unlimited access to the quote calculator.

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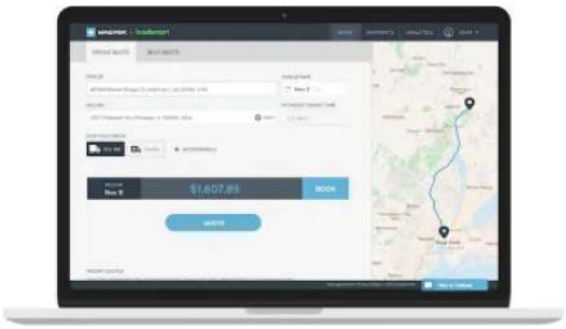
To get an instant quote, users need to enter a cargo's origin and destination to search for available capacity within the targeted lane. With Maersk Transportation, customers can connect to a large online network of trucking providers across the region right from their computer. By offering instant access to this network, a customer can get a truck scheduled for dispatch within a reasonable lead time where they need it.



With Maersk Transportation, Maersk is redefining the last-mile delivery of goods by offering customers instant quotes and on-demand booking for full 53-foot dry van truckload shipping on any lanes in NAM using the web platform or mobile application.

Once a shipment is booked, customers can view the real-time location of their shipment, with the option to receive smart notifications via e-mail or SMS for full visibility.

> "Maersk Growth will continue to build partnerships that result in new capabilities and compelling products to transform the customer experience" — Betty Yan Liu, Operating Partner for Maersk Growth

The first product from Maersk Growth

The launch of Maersk Transportation in NAM comes after a successful pilot program in June. The pilot was positively received by a group of Maersk customers who underscored the platform's ease of use and efficiency.

Powered by Loadsmart, Maersk Transportation is Maersk Growth's first product launch with a startup. Maersk Growth invested in the New York-based digital road freight broker last October 2018, leveraging on the latter's technological capabilities in finding joint opportunities to create innovative solutions for Maersk customers.

The product launch of Maersktransportation.com marks an important first milestone for Maersk to establish closer collaboration with startups in the future.

> *"Maersk Growth will continue to build partnerships that result in new capabilities and compelling products to transform the customer experience," says Betty Yan Liu, Operating Partner for Maersk Growth.*

Quick facts about Maersk Transportation:

- Maersk Transportation's website is www.maersktransportation.com. It offers full 53' dry van truckload shipping.
- Maersk Transportation provides instant quotes in any NAM lanes online, avoiding time-consuming phone calls and e-mails.
- Maersk Transportation allows scheduling of truckload shipping for the same or next day with fairlead time.
- Maersk Transportation gives full online visibility of your cargo from pick-up to delivery, with an option for smart notifications.

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Maersk Growth is the venture arm of A. P. Moller—Maersk with the mission to digitise, democratise, and decarbonise supply chains by backing new business models and technologies. With the aim to unlock growth, we invest in and partner with promising start-ups.

Written by Betty Yan Liu

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My name is Betty and I am an Operating Partner at Maersk Growth. At Growth I work extensively with startups to help them scale up their businesses.

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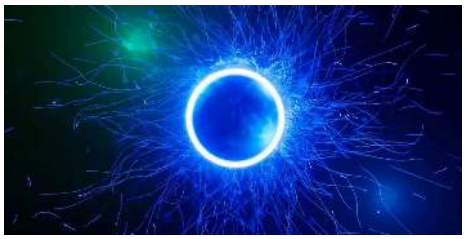

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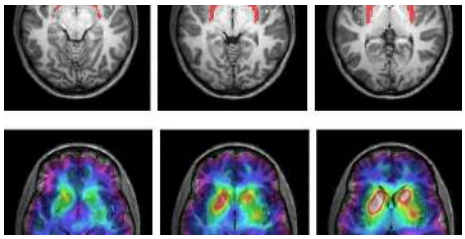

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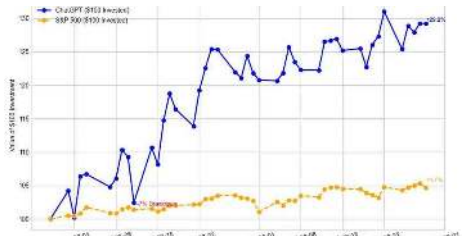

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Loadsmart & Maersk Lead Major US Port Investment

September 6, 2019

By Port Technology Team (https://www.porttechnology.org/news/author/porttechteam/)

LINKEDIN EMAIL

Loadsmart, a digital freight technology company, has announced they have raised USD $19 million for a major initiative to improve the flow of freight through American ports.

According to a statement, Ports America, one of the largest terminal operator in the U.S., has joined Maersk Growth as an investor.

The latest round follows Loadsmart's series A round in 2018, bringing total funding to date to $53.4 million.

The investment will be leveraged for Loadsmart's Smart Drayage initiative, to support the flow of shipping containers through marine terminals and develop a free-flow model to accelerate the transit of goods through the largest ports in America.

A recent FreightWaves research showed that there are more than 60 million drayage movements each year in North America, representing a $50 billion-plus market with ports contributing 26% to the U.S. gross domestic product (GDP).

According to the report, due to a lack of efficiency and transparency, 15 million man-hours and 2.3 billion gallons of fuel are wasted due to trucker congestion at ports.

Maersk, the biggest container shipping line in the world, moves around 13 million containers a year, or around 15% of the world's container market.

Ports America operates 33 port terminals in 22 cities in the U.S. and moves around 6.7 million containers in and out of the country.

The company also announced the release of Loadsmart Drayage Instant Booking. The service, available via Loadsmart's website, enables small and medium-sized shippers to book a drayage truck in seconds. For enterprise accounts Loadsmart offers an API integrated solution.

Ricardo Salgado, CEO and co-founder of Loadsmart, said, "The free-flow model moves the industry from container-specific to container-agnostic.

It means that truck drivers will be given the best container available when they arrive at the port, having pre-agreed with a specific mileage band trip.

"As a result, we project that truck drivers will be able to reduce their time to get in and out of the port by at least 25%. At the same time, we estimate that port operators will be able to reduce container shuffles by at least 50%, which is a huge efficiency gain.

Sune Stilling, head of Maersk Growth, said, "At Maersk Growth we want to define the future of trade.

"From the onset, we recognized the synergies between Maersk and Loadsmart and our joint opportunity to drive change through technology.

"Our partnership will increase inland business opportunities to add value to our clients.

Mark Montgomery, president and CEO, Ports America, said, "As the only tri-coastal terminal operator, we are focused on providing value to supply chains through transparent and efficient terminal operations and in our pursuit to provide our customers with best-in-class service, we need to rethink how goods are moved more efficiently.

"Streamlining the drayage movement benefits our trucking community with faster turn times while providing cargo owners with better visibility and more efficient container retrievals.

Felipe Capella, chief product officer and co-founder, Loadsmart. "The addition of drayage to our established expertise in truckload services allows Loadsmart to provide integrated logistics services through technology. Our goal is to offer shippers of all sizes access to a fully integrated, seamless multi-modal end-to-end experience.

Marcelo Ferreira, managing partner, Chromo Invest. "Chromo is here for the long haul. We are fully supportive of Loadsmart's executive team in their technology-first approach, which will now become the standard for drayage as well.

Maersk Invests in AI Innovation

Shipping giant continues to diversify its operations

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Ports America Joins Maersk as a Loadsmart Investor

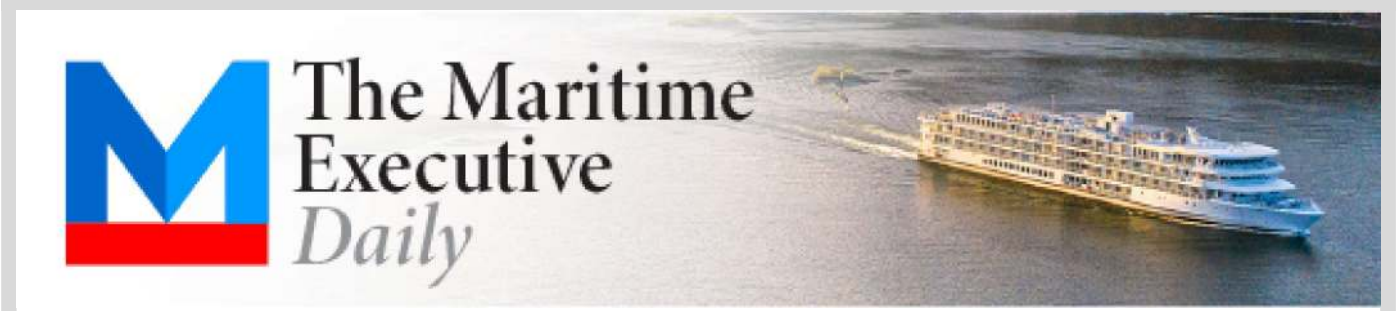
PUBLISHED SEP 7, 2019 5:10 PM BY THE MARITIME EXECUTIVE (HTTPS://MARITIME-EXECUTIVE.COM/AUTHOR/MAREX)

Digital freight technology company Loadsmart has raised $19 million to embark on a major initiative that it says will improve the flow of freight through American ports - with investment from Ports America, the largest terminal operator and stevedore in the U.S.

Loadsmart is a digital freight platform that specializes in truckload and intermodal shipping. Loadsmart is leveraging data and machine learning to build artificial intelligence processes into the complex freight cycle, allowing shippers to book a truck in seconds and providing instant and targeted loads to carriers.

Ports America joins Maersk Growth as an investor bringing total funding to date to $53.3 million. The investment will be leveraged for Loadsmart's new Smart Drayage initiative, helping industry participants rethink the flow of shipping containers through marine terminals and develop a free-flow model to accelerate the transit of goods through the largest ports in America.

"The free-flow model moves the industry from container-specific to container-agnostic. It means that truck drivers will be given the best container available when they arrive at the port, having pre-agreed with a specific mileage band trip," said Ricardo Salgado, CEO and co-founder of Loadsmart. "As a result, we project that truck drivers will be able to reduce their time to get in and out of the port by at least 25 percent. At the same time, we estimate that port operators will be able to reduce container shuffles by at least 50 percent."



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Recent research shows that there are more than 60 million drayage movements each year in North America, representing a $50 billion plus market with ports contributing 26 percent to the U.S. gross domestic product. Yet, due to lack of efficiency and transparency, 15 million man-hours and 2.3 billion gallons of fuel are wasted due to trucker congestion at ports, says Loadsmart in a blog.

Maersk alone moves around 13 million containers a year, around 15 percent of the world's container market. Ports America operates 33 port terminals in 22 cities in the U.S. and moves around 6.7 million containers in and out of the country.

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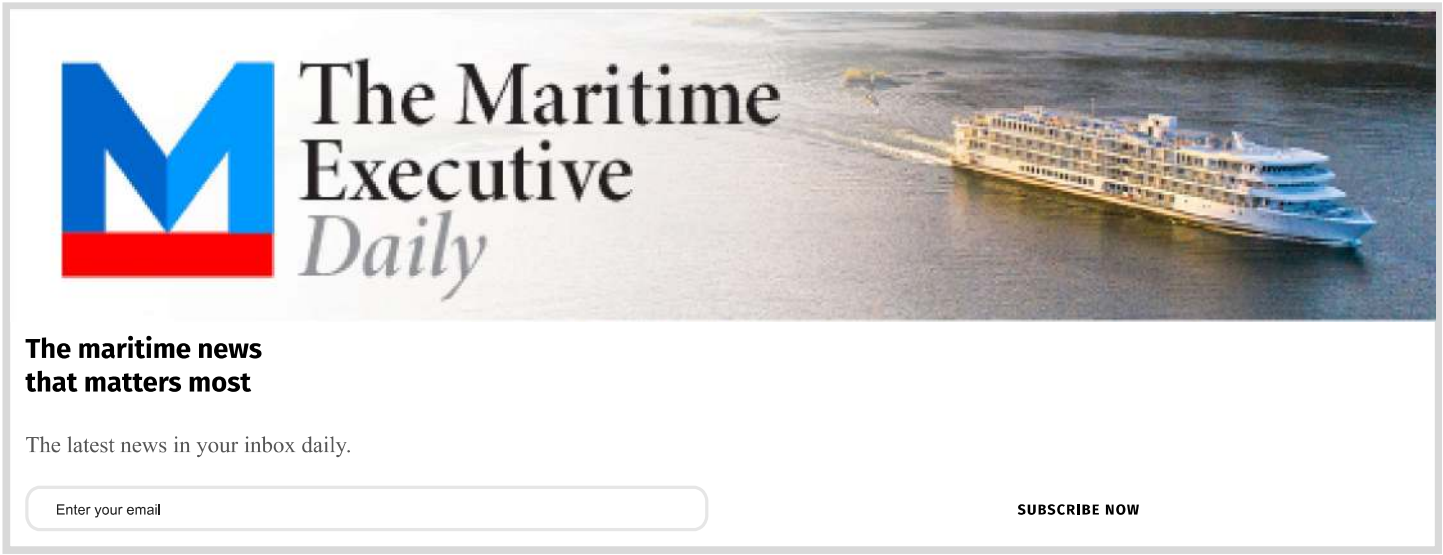

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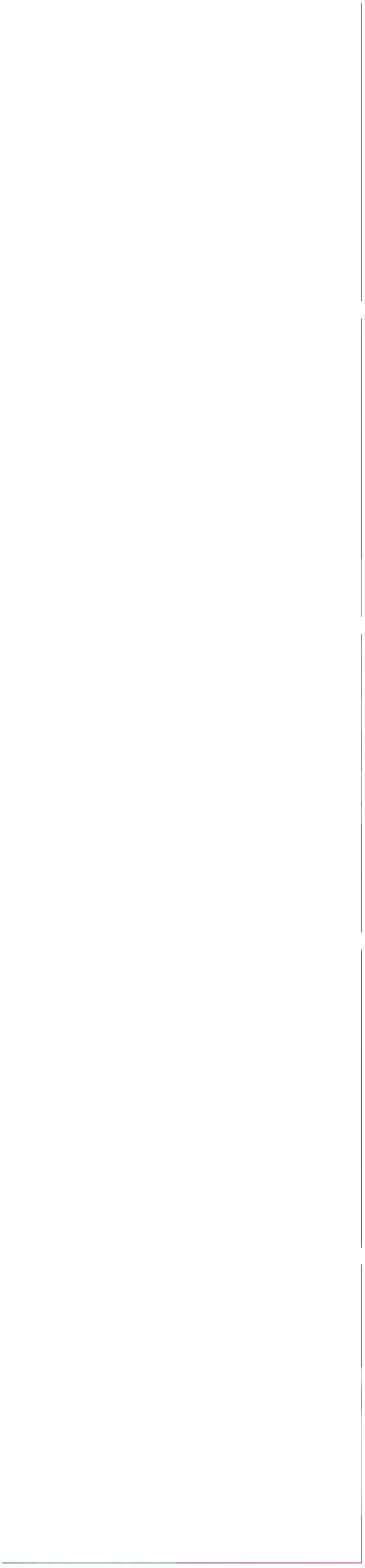

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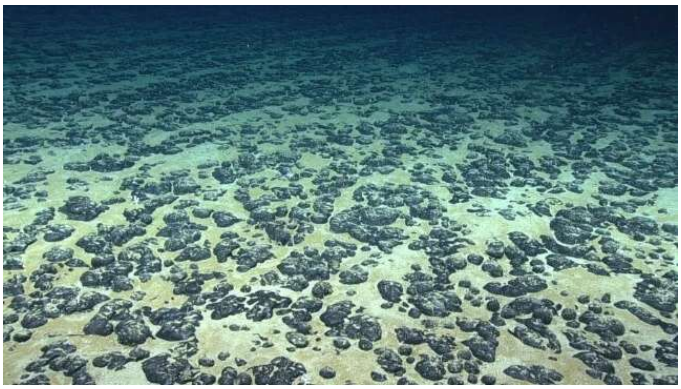

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Thiago Finardi

Principal Platform Engineer | Site Reliability Engineer | Chaos Engineer | Cloud Native | CNCF Ambassador
Florianópolis, Santa Catarina, Brazil

Summary

I am a Principal Platform Engineer at Itaú Unibanco, focusing on observability, resilience, and performance in large-scale distributed systems. With over 20 years of experience in reliability engineering, automation, and platform architecture, I drive operational excellence and innovation across complex ecosystems.

As a CNCF Ambassador with the Cloud Native Computing Foundation, I actively contribute to the global community and co-authored the Cloud Native Platform Engineering Associate (CNPA) certification in partnership with the Linux Foundation. I also organize and support Cloud Native events in Brazil, including Kubernetes Community Days Floripa and Cloud Native Day São Paulo, fostering collaboration and knowledge sharing among engineers and technology leaders.

My mission is to transform strategy into operational excellence, building resilient and scalable platforms that deliver measurable impact and sustained innovation.

Experience

Banco Itaú
3 years 3 months

Principal Platform Engineer - Reliability
July 2025 - Present (8 months)
Florianópolis, Santa Catarina, Brazil

Staff Technology Architect
April 2024 - June 2025 (1 year 3 months)
Florianópolis, Santa Catarina, Brazil

Reliability Engineer - SRE - Chaos Engineering
December 2022 - April 2024 (1 year 5 months)
Florianópolis, Santa Catarina, Brazil

In my role as a Senior Reliability Engineer (SRE) in Banco Itaú's Komodo SRE team, I lead initiatives in three crucial areas: Observability, Performance Testing, and Resilience Testing through Chaos Engineering. My focus is on empowering teams to build systems that are not only robust but also reliable and high-performing.

Taking a proactive stance, I avoid the conventional reactive problem-solving approach. Instead, my methodology involves a comprehensive analysis of the application architecture, identification of critical user journeys, and consideration of various scenarios. This strategic approach allows me to formulate hypotheses, deliberately introduce controlled failures, and subsequently validate the system's resilience.

Rather than waiting for unexpected issues, we proactively anticipate and address potential challenges. Through this strategic process, we gain insights into the system's behavior and validate its resilience. The primary goal is to ensure that our systems are well-prepared to handle unforeseen situations, ensuring uninterrupted business operations.

This approach reflects a commitment to staying ahead of potential disruptions, contributing to the creation of a technological landscape that not only meets current demands but is also agile and resilient in the face of future uncertainties.

ZENVIA
Platform Engineer - SRE
July 2022 - November 2022 (5 months)
Florianópolis, Santa Catarina, Brasil

As Senior Platform Reliability Engineer at ZENVIA, I led efforts to ensure the robustness and reliability of systems, playing a crucial role during the acquisition of multiple companies. Beyond ensuring system stability, I orchestrated a seamless transition to ZENVIA's main Cloud, adapting environments and optimizing resources. I excelled in integrating technologies from the acquired companies, applying expertise to standardize environments and resources via IaC. My primary focus was on constructing a highly available and scalable infrastructure, crucial for the success of ZENVIA's products.

Ambev Tech
Site Reliability Engineer

July 2021 - July 2022 (1 year 1 month)
Florianópolis, Santa Catarina, Brasil

As a Senior Reliability Engineer at AmbevTech, I played a crucial role in ensuring the reliability and dependability of our systems. My responsibilities included implementing monitoring and observability solutions for real-time insights into the health of logistics systems, optimizing cloud-based infrastructures for scalability and high availability, and automating processes for efficiency. I conducted capacity planning assessments, established CI/CD pipelines for efficient software delivery, and led efforts in incident response.

I emphasize my commitment to standardizing environments and resources through Infrastructure as Code (IaC). I adopted and promoted IaC standards to ensure consistency, scalability, and replicability in all implementations, contributing to more effective administration and a robust infrastructure.

I also highlight my role in modernizing systems, leading the transition to microservices and event-driven architectures. Additionally, I successfully conducted the migration of data centers to the cloud, promoting a more agile, efficient approach aligned with contemporary demands. Overall, my expertise contributed to the creation of highly reliable and scalable systems at AmbevTech.

Azion Technologies
Site Reliability Engineer
January 2021 - July 2021 (7 months)
Palo Alto, Califórnia, Estados Unidos

As a Senior Reliability Engineer at Azion Technologies, a Full Stack Edge platform, I played an essential role in implementing Infrastructure as Code (IaC) practices for efficient resource allocation. I established comprehensive monitoring and observability solutions to gain real-time insights into the system's health and performance. I led emergency response efforts and managed changes effectively through robust processes.

Additionally, I played a critical role in overseeing data centers, networks, and implementing protocols such as BGP. I actively participated in peering initiatives with cloud giants like Google, AWS, and Azure, ensuring optimized and strategic connectivity. This collaboration strengthened Azion Technologies' position in the global landscape, providing a resilient and high-performance infrastructure.

By conducting demand forecasts and capacity planning, I ensured optimized resource allocation. I also provisioned Edge Computing infrastructure for high-performance and low-latency services at the network edge, managing infrastructure provisioning in Cloud Computing environments. My focus was on guaranteeing the efficiency and performance of systems, continuously optimizing to deliver reliable, scalable, and high-performing services at Azion Technologies.

Brazilian Army

6 years

Site Reliability Engineer

February 2020 - January 2021 (1 year)

Porto Alegre, Rio Grande do Sul, Brasil

As a First Lieutenant Officer in the Brazilian Army at the 1st Center for Information Technology, I served as a Site Reliability Engineer (SRE). My primary responsibility was to ensure the efficiency and performance of services. I analyzed monitoring data, including Service Level Objective (SLO) and Service Level Indicator (SLI) metrics, to identify areas for improvement.

I played a crucial role in managing changes to services, ensuring continuous and uninterrupted updates and modifications. Additionally, I conducted demand forecasts and capacity planning to optimize resource allocation and maintain service availability. In emergency situations, I responded promptly to critical incidents, taking necessary actions to minimize downtime and restore service operations swiftly.

As an SRE in the Brazilian Army, my focus was on ensuring the efficiency, reliability, and high performance of the services provided.

Infrastructure Systems Engineer

April 2016 - February 2020 (3 years 11 months)

Porto Alegre e Região, Brasil

As an Infrastructure Systems Engineer at the 1st Center for Information Technology of the Brazilian Army, I held a versatile role encompassing various responsibilities. This included providing 3rd level support for services in the 1st CTA Service Catalog, managing the VMware vSphere virtualization environment, administering the Storage Area Network (SAN), overseeing GNU/Linux and Windows Server Operating Systems, configuring DNS services, web servers, Moodle, Zimbra, proxies, Active Directory, MSCS,

failover clusters, and controlling the F5 BIG-IP Application Firewall and Local Traffic Manager.

My focus was on ensuring efficient and reliable infrastructure operations, maintaining optimal performance, and providing support for critical services within the organization. During this period, I worked to achieve specific goals and contribute to the success of infrastructure operations.

Information Technology Project Manager
February 2015 - March 2016 (1 year 2 months)
Porto Alegre e Região, Brasil

As an IT Project Manager at the 1st Center for Information Technology of the Brazilian Army, my role involved managing network and data center projects. I provided guidance and advisory support in various aspects, including IT projects, data links, network certification, metropolitan and regional networks, EBNet, corporate and specific systems, and IT service transitions. Additionally, I participated in the preparation of artifacts for asset acquisition and IT service contracts.

Throughout this experience, I embraced results-oriented approaches, aiming to meet specific goals and promote the success of IT projects in an integrated manner. Monitoring, controlling, and reporting on the performance and results of the entire project life cycle was an integral part of pursuing operational excellence, ensuring the availability of necessary resources for each endeavor.

Senac-RS
7 years 2 months

System Administration Specialist
April 2011 - February 2015 (3 years 11 months)

As an Infrastructure Systems Engineer at Senac, I developed strategies and continuously enhanced the network and telecommunications infrastructure. I planned and implemented improvements for the IT environment, administering servers, including CentOS, Debian, and Windows Server, and managing virtualization servers with Xen Server.

My responsibilities included controlling software licenses, performing preventive and corrective maintenance in laboratories, and implementing security policies, backup plans, and disaster recovery. The central focus was on ensuring efficient and secure operations of the IT infrastructure, implementing necessary improvements, and adhering to best practices.

Throughout this experience, I pursued results-oriented approaches, meeting specific needs, and promoting the success of systems administration operations in an integrated manner.

Technical Education Teacher
January 2008 - February 2015 (7 years 2 months)
Uruguaiana e redondezas, Brasil

As a Technical Education Teacher at Senac, my main responsibility was to deliver high-quality instruction in information technology courses. I taught various subjects within the Technical Course in Informatics and conducted continuing education courses. My focus was on providing comprehensive and engaging instruction to students, ensuring they acquired the necessary knowledge and skills in the field of information technology. Throughout this experience, I sought effective pedagogical approaches to promote meaningful learning and student development.

Information Technology Coordinator
November 2009 - September 2010 (11 months)
Uruguaiana e redondezas, Brasil

As an IT Coordinator at Senac, my role encompassed several key responsibilities. These included planning IT courses, developing research projects, maintaining laboratories, and administering the Internet server (CentOS) and Data server (Debian). I oversaw and coordinated all activities related to the IT infrastructure, ensuring the proper functioning of resources and the availability of necessary services.

Additionally, I was involved in team coordination, project management, and strategizing to optimize resources and drive continuous improvement in IT services. Throughout this experience, I adopted an approach aligned with best practices to ensure operational effectiveness and the success of IT coordination operations.

Pixeon
IT Consultant
October 2010 - April 2011 (7 months)
Florianópolis e Região, Brasil

As an IT Consultant at Pixeon Medical System, I undertook a variety of crucial responsibilities. I managed software deployment projects, overseeing the successful implementation of Pixeon's solutions at client locations. This included deploying PACS servers such as DICOM Store, DICOM Worklist,

and DICOM Print. I was also responsible for provisioning and configuring databases, working with platforms like Oracle, PostgreSQL, and SQL Server.

Furthermore, I conducted thorough analyses of the hardware, software, network, and imaging equipment infrastructure to ensure optimal performance and compatibility. As part of my role, I deployed PACS servers and provided training to clients on how to effectively administer and utilize these tools. Overall, as an IT Consultant at Pixeon Medical System, my focus was on delivering top-notch customer service, managing software deployment projects, provisioning and configuring databases, analyzing infrastructure, and providing training and support for PACS server administration.

RPS Sistemas LTDA

4 years 10 months

Full Stack Cobol Developer

October 2005 - August 2007 (1 year 11 months)

Uruguaiana e redondezas, Brasil

As a Full Stack Cobol Developer at RPS Sistemas, I was responsible for analyzing requirements, planning, and conceptual modeling of software projects. I also designed and implemented the database structure, interfaces for applications, and coded and programmed projects. Additionally, I developed applications for both desktop and web environments, conducting research on patterns and technologies for web development.

Throughout my role, I leveraged my expertise in the Cobol programming language to deliver robust and efficient software solutions, collaborating with cross-functional teams to ensure successful project outcomes.

Information Technology Support Analyst

November 2002 - September 2005 (2 years 11 months)

As a Support Analyst at RPS Sistemas, I undertook a range of responsibilities. I provided customer support, addressing inquiries and resolving issues in a timely manner. Additionally, I played a crucial role in deploying the company's systems at client locations, ensuring smooth implementation and adherence to client requirements. I conducted comprehensive training sessions to familiarize users with the company's systems and provided ongoing support, utilizing various communication channels such as phone, instant messaging, and remote access. Testing and error detection were integral parts of my responsibilities, enabling the identification and resolution of any system-related issues. Furthermore, I facilitated the process of adapting the systems to user

needs by handling requests for alterations. Overall, my focus as a Support Analyst was on delivering exceptional customer service and ensuring the smooth functioning of the company's systems for client satisfaction.

Education

Federal University of Rio Grande do Sul

Master's in Computer Science, High-Performance Computing and Distributed Systems · (February 2018 - December 2021)

Universidade do Sul de Santa Catarina

Postgraduate Degree in Information Security Management, Computer and Information Systems Security/Information Assurance · (2013 - 2014)

Universidade Norte do Paraná

Bachelor's degree in Analysis and systems development, Information Technology · (2009 - 2012)

December 05, 2025

To the USCIS Immigration Officer,

I am Thiago Finardi, currently working as a Principal Platform Engineer at Itaú Unibanco, and I am pleased to provide this letter on behalf of Amim Moises Salum Knabben. I have worked for many years in site reliability engineering and distributed systems, and I also serve as an organizer in the cloud native community in Florianópolis, Santa Catarina, Brazil. In this context, I have had the opportunity to collaborate directly with Amim and observe his work in building the regional ecosystem for cloud-native technologies.

I first became familiar with Amim's work through the creation of the Cloud Native Santa Catarina Community Group, an official chapter focused on cloud-native technologies and supporting projects from the Cloud Native Computing Foundation (CNCF) in the city of Florianópolis. Before this initiative, the State lacked an organized, officially recognized CNCF community dedicated to Cloud Native technologies. There was no structured networking space for professionals working with Kubernetes, no regular educational events on cloud-native topics in the South of Brazil, and limited visibility for the local technology community within the broader cloud-native landscape. Amim took the initiative to change this situation by establishing the community group and leading its activities.

As part of this same effort, Amim served as Program Manager and Team Lead (Organizer 1) for Kubernetes Community Days (KCD) Floripa Brasil 2024, held on December 6, 2024, at Sapiens Parque in Florianópolis. KCD events are part of the official CNCF program for community-driven conferences on Kubernetes, a system for running applications in containers, and related cloud-native technologies. KCD Floripa 2024 was an entirely in-person event. It represented the second significant KCD event in Brazil and the first Kubernetes Community Days held in the South region of the country. The program included national and local speakers addressing topics such as Kubernetes, GitOps, DevOps, DevSecOps, monitoring and observability, container security, and digital transformation strategies based on CNCF projects.

The community that emerged from these initiatives has shown measurable engagement. The CNCF Santa Catarina group has more than 900 followers on LinkedIn, indicating significant interest among professionals working with cloud-native technologies. KCD Floripa 2024 brought approximately 200 in-person participants for a full day of multiple technical sessions. Moreover, the event was organized by a team of seven organizers from companies of recognized presence in the technology sector, including Broadcom, Elastic, Itaú Unibanco, Neoway, Kodata, Nuvme, and Zenvia. Speakers included professionals from organizations such as Magalu Cloud, PicPay, iFood, Grafana, Hapvida NotreDame Intermédica, Kubeshop, Noson, DevOps Pro,

Itaú, and Sysdig, demonstrating that the initiative attracted contributors from a broad range of relevant institutions.

Institutional support also reflects the level of recognition this contribution has achieved. KCD Floripa 2024 was officially supported by the Cloud Native Computing Foundation, which hosts key cloud-native projects, including Kubernetes. The approval process is documented in the CNCF GitHub repository through the issue "KCD Floripa Brasil 2024 (December) · Issue #558," where the organizers demonstrated compliance with program requirements, including the need for at least one CNCF Ambassador or maintainer among the organizers. The Cloud Native Santa Catarina Community Group and the KCD Floripa event have dedicated pages on the official CNCF community platform community.cncf.io, which publicly document the activities and confirm their status within the CNCF ecosystem.

The concrete impact of this work extends beyond the initial event. The KCD Floripa 2024 program offered more than fifteen technical sessions in a single day, including keynotes, lightning talks, and practical workshops. Topics included disaster recovery for Kubernetes on-premises, service mesh in production, the use of Prometheus and OpenTelemetry at scale, and troubleshooting for serverless systems. As a result, the initiative democratized access to advanced cloud native knowledge in a region that previously lacked official CNCF events. Streaming and post-event recordings were made available, expanding the reach beyond the 200 in-person participants and enabling the wider community to use the material on an ongoing basis.

The contribution has also generated opportunities and partnerships directly connected to the community leadership demonstrated by Amim. The events established official sponsorships from companies, including SuSE, Cast AI, and Loadsmart, among others, which invested financial resources and associated their brands with the community activities. A regional company, Nuvme, began sponsoring meetups and virtual events, strengthening the local Kubernetes ecosystems. These same companies went on to sponsor other KCD events in Brazil, such as KCD Rio de Janeiro and KCD São Paulo, demonstrating continuity in the relationships established. In addition, the CNCF Ambassador program associated with this work offers benefits such as an exclusive Slack channel for organizers, weekly office hours, discounts on Linux Foundation certifications such as CKAD and KCNA, discounts for KubeCon + CloudNativeCon, and certification vouchers for active chapters, which are distributed at events to support professional development.

The references in the field have highlighted the relevance of this contribution. The Linux Foundation, which oversees CNCF and the KCD program, provided infrastructure, the Bevy platform, and marketing support for the event as part of the official program. Furthermore, KCD Floripa 2024 was mentioned in KubeWeekly Newsletter 396, the official CNCF newsletter that communicates Kubernetes and

cloud-native events to a global audience. The newsletter specifically announced that "KCD Floripa, Brazil" would take place in December and referenced its sponsor prospectus, positioning the event alongside initiatives of interest to the broader cloud-native community. In this context, the creation of the Cloud Native Santa Catarina Community Group and the leadership in KCD Floripa 2024 represent an original contribution with significant and sustainable impact on the CNCF ecosystem in Brazil and Latin America, strengthening the Kubernetes community and establishing Florianópolis as a recognized cloud native hub in the South of the country.

Based on my direct experience as a co-creator and organizer of this community work, and on my professional background in site reliability engineering, observability, and distributed systems, I consider that Amim Moises has made a documented and relevant contribution to the cloud native field through the establishment and leadership of the CNCF Santa Catarina Community Group and KCD Floripa 2024. I fully support this petition and remain available for any clarification that may be required.

Sincerely,

Thiago Finardi
Principal Platform Engineer, Itaú Unibanco
Florianópolis, Santa Catarina, Brazil
thiago.finardi@itau-unibanco.com.br
+55 11 94125-5394

cncf / kubernetes-community-days Public

Code Issues 41 Pull requests 1 Discussions Actions Projects

New issue

KCD Floripa Brasil 2024 (December) #558

Closed

Assignees

Labels Brazil KCD complete

knabben opened on Apr 4, 2024 · edited by AudMonte01 Edits

KCD Organizer Checklist

Please fill in information, organizers, and sponsors as you assemble them, and then make a new comment when this application is ready for review.

Event Details

Event Location: SAPIENS PARQUE, FLORIANÓPOLIS

Event Date and Time: 6 December, 2024

Expected Number of Attendees: 150

- [ ] Event cost per ticket, and if you will have early bird pricing or not

Event type:

- [ ] Virtual
- [ ] Hybrid

In person

Organizers Details (identify at least 3 organizers). Designate who will be the CFP admin, as well as the financial officer:

Organizer 1: Amim Knabben, Broadcom, CNCF Ambassador (GitHub: **@knabben**), amim.knabben@gmail.com

-- Program manager/team lead (organizers organizers, and liaison with CNCF)

Organizer 2: Carol Valencia, Krol Cloud, CNCF Ambassador (GitHub: **@krol3**), valencia0.carol@gmail.com
-- Program manager/team lead (organizers organizers, and liaison with CNCF)
-- Content (program committee, CFP, and speakers) : carol /hudson

Organizer 3: Thiago Finardi, Itaú Unibanco, Staff Platform Engineer (GitHub: **@tfinardi**), tfinardi@gmail.com
-- Marketing (includes website and ticketing and social media)

Organizer 4: Rafael Mateus, Neoway, Staff Engineer (GitHub: **@rafaelbmateus**), rafaelbmateus.dev@gmail.com
-- Sponsorships coordination

Organizer 5: Renato dos Santos, Kodata, Software Engineer (GitHub: **@shazaum**), shazaum@gmail.com
-- Fiscal Sponsor & Accounting

Organizer 6: Peter König, Nuvme, DevOps Engineer, (GitHub: **@konigpeter**), koenig.r.peter@gmail.com
-- Sponsorships coordination

Organizer 7: Emídio Neto, Zenvia, SRE, (Github: **@emdneto**), zsh.emidio@gmail.com
-- Marketing (includes website and ticketing and social media)

Terms

IMPORTANT: These are the terms within the checklist that must be abided by. Note - There are exceptions to these requirements in some jurisdictions due to applicable laws & regulations.

No other Kubernetes Community Day event in same major city (check with past organizers)

This event is at least 2 months apart from other pre-planned KCDs within a 2-hour flight away happening in the same language. As well as other events hosted by CNCF or Linux Foundation.

We have a minimum of 3 organizers from 3 different organizations

Every organizer has an account on Cloud Native Community Groups

Each organizer lives within the KCD city or just outside of it. For small countries, the organizers can live within the region, but must be able to easily travel to the KCD if it were in-person.

At least one organizer is a CNCF employee, CNCF ambassador, or CNCF project maintainer.

All organizers agree to follow the event guidelines and CNCF Code of Conduct

All organizer inquiries / communication for CNCF must at least be summarized via GitHub (comment under your KCD issue) for easy tracking

- [ ] All organizers have taken Inclusive Open Source Community Orientation (LFC102)

Agree to get logo creation and approval with and from CNCF. NOTE: a new logo will be created in an effort provide unity, and and official KCD stamp of approval.

Agree to offer at least 3 complimentary tickets to increase diversity for the event

Share the sponsor prospectus with CNCF via your GitHub issue, and link it on your website.

Agree to ensure the final program schedule is diverse (e.g., not all speakers of one gender, one culture, or from 1 or 2 of the same company). Here are some tips on how to create a diverse lineup.

- [ ] Agree to use Cloud Native Community Groups for registration, scheduling, and event website. If using a platform outside of Bevy, organizers must provide CNCF with a full list of attendees. -- Regardless of your platform choice, please use these questions to help create your registration form. NOTE: You must use the CNCF opt-in language

Agree to use Sessionize as the Call for Proposals (CFP) platform.

Agree to submit your final lineup to kcd@cncf.io for review, prior to publishing it

Getting started checklist for organizers

Schedule monthly check-ins with KCD Core Organizer(s) (kcd@cncf.io)

Minimum of 3 sponsors committed (not required for virtual only events)
Sponsor 1
Sponsor 2
Sponsor 3

Identified fiscal entity that can accept payments such as from sponsorships and ticket sales. As well as pay out expenses.

Added usernames for CNCF Slack for all organizers so that we can add you to the #kcd-organizers channel

- [ ] Create a LinkedIn profile and/or Twitter handle specific to your KCD event (except for countries like China and Korea where Twitter is not used)

Getting started checklist for CNCF:

- [ ] Organizer email alias has been created

Region created in Bevy

Added to Bevy header

CFP code given for Sessionize

- [ ] Marketing Plan shared

Organizer Planning Timeline

- [ ] Make a copy of this timeline based on whether your event is In-person, Hybrid, or Virtual and link your own spreadsheet here ().

To assure you have a diverse lineup, you are required to send a copy of your program to kcd@cncf.io before you publish it.

Post event checklist for Organizers:

- [ ] Send CNCF event analytics
- [ ] Schedule post mortem meeting
- [ ] Send CNCF videos to be uploaded to YouTube
- [ ] Link videos from YouTube to event page
- [ ] Post event survey sent out
- [ ] Fill out Credly badge request form for 1 badge per KCD

Post event checklist for CNCF:

- [ ] Removed from Bevy header
- [ ] CFP deactivated
- [ ] Upload videos to YouTube
- [ ] Transparency report and YouTube playlist (if there is one) linked from cncf.io/kcds
- [ ] Bevy page marked as dormant

👍 1 🎉 1 🚀 1

knabben changed the title ~~KCD Floripa 2024~~ KCD Floripa Brasil 2024 on Apr 4, 2024

AudMonte01 added **Not Yet Approved** on Apr 5, 2024

AudMonte01 changed the title ~~KCD Floripa Brasil 2024~~ KCD Floripa Brasil 2024 (November) on Jun 14, 2024

AudMonte01 self-assigned this on Jun 14, 2024

AudMonte01 removed **Not Yet Approved** on Jun 14, 2024

AudMonte01 on Jun 14, 2024 Collaborator •••

Hello **@knabben** - Good news, we can schedule a kick-off meeting for this. Please schedule something the week of the 24th: https://calendly.com/audmonte/kcd-onboarding-kickoff-call

🎉 1 🚀 2

KCD Floripa 2024 🔥 In-person

Event information ⚠️

KCDs are community-organized events that bring together people interested (technical or otherwise) in the cloud-native and open-source community, with the goal of promoting education, collaboration, and networking. KCDs events are officially supported by the Cloud Native Computing Foundation (CNCF). These events are held locally by the community to contribute to the growth and sustainability of the cloud-native community. Everyone is very welcome!

Main topics covered 📋

- Kubernetes
- GitOPs, DevOps, DevSecOps
- Monitoring and Observability
- Container Security
- Digital transformation strategies
- Mentoring
- and much more related to the Cloud Native world!! ☁️

Date and location 📌

When: Friday, December 6th (in person)

Where: Sapiens Park, Av. Luiz Boiteux Piazza, 130 - Canasvieiras, Florianópolis - SC, 88056-000

Third **batch of tickets now available!** Buy directly through ***"Get tickets"*** in the page header.

What will the event be like? 💡

The event will be entirely in person!

Streaming and post-event recording will be available.

National and international speakers.

How to participate? 👥

Become a sponsor - Call for sponsors: A great opportunity to contribute to the community, stay close to the latest innovations, and have your name recognized in the Cloud Native community!

👉 Learn more by visiting our "Sponsor Prospectus" and also contact us through social media or email: floripa-organizers@kubernetescommunitydays.org (mailto:floripa-organizers@kubernetescommunitydays.org)

Become a speaker - Call for papers (CFP): https://sessionize.com/kcd-floripa-2024 (https://sessionize.com/kcd-floripa-2024)

Tickets: Information on how to purchase your ticket coming soon, stay tuned so you don't miss this chance!

Follow us on social media 🤳

CTO

Software Engineer Specialist

See bio

Edson Celio Ferreira

Sysdig

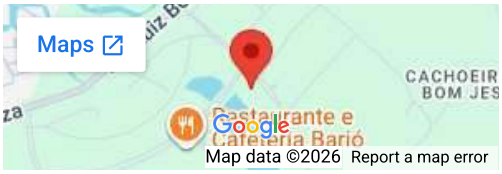
Solutions Engineer

When

Friday, December 6, 2024
6:00 AM – 8:00 PM (EST)

Where

Av. Luiz Boiteux Piazza, 130
130 Avenida Luiz Boiteux Piazza
Florianópolis 88056-000
(https://www.google.com/maps/dir//Av. Luiz Boiteux Piazza, 130%20130 Avenida Luiz Boiteux Piazza%20Florianópolis 88056-000)



Agenda

6:00 AM

Accreditation

7:00 AM

Welcome to the Brazil/LATAM Community!

Carol Valencia

7:15 AM

Kubernetes in P0: Defining a solid disaster recovery strategy for your on-premises K8s

Erivaldo Lopes

7:50 AM

Observability as the cornerstone of great architecture.

Elton Minetto

8:25 AM

Coffee Break

8:55 AM

Lightning Talk

Sponsor

9:05 AM

Service Mesh: Challenges and reflections after two years in production.

Jonathan Morais

9:40 AM

Prometheus and OpenTelemetry: Practicality at scale

Arthur Sens

10:15 AM

AI and Backstage.io in Legacy Systems Management: Precise Testing and Efficient Documentation

Matheus Ulisses Paiva Ambrozio

10:45 AM

Lunch

11:50 AM

A tour of the Kubernetes network - What we can learn in 30 minutes

Ricardo Katz

12:25 PM

Troubleshooting Serverless systems with Open Telemetry in Production

Daniel Dias

1:00 PM

30 seconds of passwords! Automating password rotation in the K8S environment.

George Tavares

1:35 PM

Coffee Break

2:05 PM

Lightning Talk

Sponsor

2:25 PM

Simple and Efficient Cloud Native Development with DevContainers

Fabricio Veronese

3:00 PM

Frankenstein architectures versus the modern Prometheus

Sheimy Rahman

3:35 PM

10 Years of Kubernetes - Past, Present, and Future

Edson Ferreira

4:00 PM

Closing

Raffles, final photo

4:30 PM

Happy Hour

Official band of KCD Floripa

Hosts

https://community.cncf.io/events/details/cncf-kcd-brasil-presents-kcd-floripa-brasil-2024/

Hosts

Amim Knabben

Broadcom

R&D Engineer

Carol Valencia

KCD Rio 2025

Content Manager

See bio

Rafael Mateus

Neoway

Software Engineer

See bio

Peter König

Nuvme

DevOps Engineer

Thiago Finardi

Itaú Unibanco

Staff Reliability Engineer

See bio

Emídio Neto

KCD Floripa 2024

Marketing

See bio

Renato dos Santos

Kodata

Rafael Ferreira

Stefanini North America

Platform Engineer

See bio

This badge was issued to Amim Moises Salum Knabben

Date issued: January 20, 2025

Verify Celebrate

Earn this Badge

Organizer - 2024 Cloud Native Community Group

Issued by The Linux Foundation

Earners of this badge are community members volunteering their time to execute a CNCF Chapter meetups through the Cloud Native Community Group program (CNCG). The earners have lent their expertise alongside fellow program organizers to manage logistics, with the end goal of helping spread the knowledge of Cloud Native. Organizers perform tasks like curating content, securing sponsorships and venues, finding swag to give away, promoting their meetups, and often times executing virtual events.

Learn more

Experience Intermediate Months Free

Skills

Cloud Native Ecosystem | Event Planning | Open Source Collaboration | Virtual Hosting

Earning Criteria

Organizer: 2024 KCD

Related

Contributor - KCD Pune 2024

Champion - KCD New York 2024

Contributor - KCD Lima 2024

Exhibit G. Person's authorship of scholarly articles in the field, in professional or major trade publications

This article is more than one year old. Older articles may contain outdated content. Check that the information in the page has not become incorrect since its publication.

Defining Network Policy Conformance for Container Network Interface (CNI) providers

By **Matt Fenwick (Synopsys), Jay Vyas (VMWare), Ricardo Katz, Amim Knabben (Loadsmart), Douglas Schilling Landgraf (Red Hat), Christopher Tomkins (Tigera)** | Tuesday, April 20, 2021

Special thanks to Tim Hockin and Bowie Du (Google), Dan Winship and Antonio Ojea (Red Hat), Casey Davenport and Shaun Crampton (Tigera), and Abhishek Raut and Antonin Bas (VMware) for being supportive of this work, and working with us to resolve issues in different Container Network Interfaces (CNIs) over time.

A brief conversation around "node local" Network Policies in April of 2020 inspired the creation of a NetworkPolicy subproject from SIG Network. It became clear that as a community, we need a rock-solid story around how to do pod network security on Kubernetes, and this story needed a community around it, so as to grow the cultural adoption of enterprise security patterns in K8s.

In this post we'll discuss:

- Why we created a subproject for Network Policies
- How we changed the Kubernetes e2e framework to `visualize` NetworkPolicy implementation of your CNI provider
- The initial results of our comprehensive NetworkPolicy conformance validator, *Cyclonus*, built around these principles
- Improvements subproject contributors have made to the NetworkPolicy user experience

Why we created a subproject for NetworkPolicies

In April of 2020 it was becoming clear that many CNIs were emerging, and many vendors implement these CNIs in subtly different ways. Users were beginning to express a little bit of confusion around how to implement policies for different scenarios, and asking for new features. It was clear that we needed to begin unifying the way we think about Network Policies in Kubernetes, to avoid API fragmentation and unnecessary complexity.

For example:

- In order to be flexible to the user's environment, Calico as a CNI provider can be run using IPIP or VXLAN mode, or without encapsulation overhead. CNIs such as Antrea and Cilium offer similar configuration options as well.
- Some CNI plugins offer iptables for NetworkPolicies amongst other options, whereas other CNIs use a completely different technology stack (for example, the Antrea project uses Open vSwitch rules).
- Some CNI plugins only implement a subset of the Kubernetes NetworkPolicy API, and some a superset. For example, certain plugins don't support the ability to target a named port; others don't work with certain IP address types, and there are diverging semantics for similar policy types.
- Some CNI plugins combine with OTHER CNI plugins in order to implement NetworkPolicies (canal), some CNI's might mix implementations (multus), and some clouds do routing separately from NetworkPolicy implementation.

Although this complexity is to some extent necessary to support different environments, end-users find that they need to follow a multistep process to implement Network Policies to secure their applications:

- Confirm that their network plugin supports NetworkPolicies (some don't, such as Flannel)
- Confirm that their cluster's network plugin supports the specific NetworkPolicy features that they are interested in (again, the named port or port range examples come to mind here)
- Confirm that their application's Network Policy definitions are doing the right thing

- Find out the nuances of a vendor's implementation of policy, and check whether or not that implementation has a CNI neutral implementation (which is sometimes adequate for users)

The NetworkPolicy project in upstream Kubernetes aims at providing a community where people can learn about, and contribute to, the Kubernetes NetworkPolicy API and the surrounding ecosystem.

The First step: A validation framework for NetworkPolicies that was intuitive to use and understand

The Kubernetes end to end suite has always had NetworkPolicy tests, but these weren't run in CI, and the way they were implemented didn't provide holistic, easily consumable information about how a policy was working in a cluster. This is because the original tests didn't provide any kind of visual summary of connectivity across a cluster. We thus initially set out to make it easy to confirm CNI support for NetworkPolicies by making the end to end tests (which are often used by administrators or users to diagnose cluster conformance) easy to interpret.

To solve the problem of confirming that CNIs support the basic features most users care about for a policy, we built a new NetworkPolicy validation tool into the Kubernetes e2e framework which allows for visual inspection of policies and their effect on a standard set of pods in a cluster. For example, take the following test output. We found a bug in OVN Kubernetes. This bug has now been resolved. With this tool the bug was really easy to characterize, wherein certain policies caused a state-modification that, later on, caused traffic to incorrectly be blocked (even after all Network Policies were deleted from the cluster).

This is the network policy for the test in question:

```
metadata:
  creationTimestamp: null
  name: allow-ingress-port-80
spec:
  ingress:
  - ports:
    - port: serve-80-tcp
  podSelector: {}
```

These are the expected connectivity results. The test setup is 9 pods (3 namespaces: x, y, and z; and 3 pods in each namespace: a, b, and c); each pod runs a server on the same port and protocol that can be reached through HTTP calls in the absence of network policies. Connectivity is verified by using the agnhost network utility to issue HTTP calls on a port and protocol that other pods are expected to be serving. A test scenario first runs a connectivity check to ensure that each pod can reach each other pod, for 81 (= 9 x 9) data points. This is the "control". Then perturbations are applied, depending on the test scenario: policies are created, updated, and deleted; labels are added and removed from pods and namespaces, and so on. After each change, the connectivity matrix is recollected and compared to the expected connectivity.

These results give a visual indication of connectivity in a simple matrix. Going down the leftmost column is the "source" pod, or the pod issuing the request; going across the topmost row is the "destination" pod, or the pod receiving the request. A `.` means that the connection was allowed; an `X` means the connection was blocked. For example:

```
Nov  4 16:58:43.449: INFO: expected:

-   x/a x/b x/c y/a y/b y/c z/a z/b z/c
x/a .   .   .   .   .   .   .   .   .
x/b .   .   .   .   .   .   .   .   .
x/c .   .   .   .   .   .   .   .   .
y/a .   .   .   .   .   .   .   .   .
y/b .   .   .   .   .   .   .   .   .
y/c .   .   .   .   .   .   .   .   .
z/a .   .   .   .   .   .   .   .   .
z/b .   .   .   .   .   .   .   .   .
z/c .   .   .   .   .   .   .   .   .
```

Below are the observed connectivity results in the case of the OVN Kubernetes bug. Notice how the top three rows indicate that all requests from namespace x regardless of pod and destination were blocked. Since these experimental results do not match the expected results, a failure will be reported. Note how the specific pattern of failure provides clear insight into the nature of the problem -- since all requests from a specific namespace fail, we have a clear clue to start our investigation.

```
Nov  4 16:58:43.449: INFO: observed:

-   x/a x/b x/c y/a y/b y/c z/a z/b z/c
x/a X   X   X   X   X   X   X   X   X
x/b X   X   X   X   X   X   X   X   X
x/c X   X   X   X   X   X   X   X   X
y/a .   .   .   .   .   .   .   .   .
y/b .   .   .   .   .   .   .   .   .
y/c .   .   .   .   .   .   .   .   .
z/a .   .   .   .   .   .   .   .   .
z/b .   .   .   .   .   .   .   .   .
z/c .   .   .   .   .   .   .   .   .
```

This was one of our earliest wins in the Network Policy group, as we were able to identify and work with the OVN Kubernetes group to fix a bug in egress policy processing.

However, even though this tool has made it easy to validate roughly 30 common scenarios, it doesn't validate *all* Network Policy scenarios - because there are an enormous number of possible permutations that one might create (technically, we might say this number is infinite given that there's an infinite number of possible namespace/pod/port/protocol variations one can create).

Once these tests were in play, we worked with the Upstream SIG Network and SIG Testing communities (thanks to Antonio Ojea and Ben Elder) to put a testgrid Network Policy job in place. This job continuously runs the entire suite of Network Policy tests against GCE with Calico as a Network Policy provider.

Part of our role as a subproject is to help make sure that, when these tests break, we can help triage them effectively.

Cyclonus: The next step towards Network Policy conformance

Around the time that we were finishing the validation work, it became clear from the community that, in general, we needed to solve the overall problem of testing ALL possible Network Policy implementations. For example, a KEP was recently written which introduced the concept of micro versioning to Network Policies to accommodate describing this at the API level, by Dan Winship.

In response to this increasingly obvious need to comprehensively evaluate Network Policy implementations from all vendors, Matt Fenwick decided to evolve our approach to Network Policy validation again by creating Cyclonus.

Cyclonus is a comprehensive Network Policy fuzzing tool which verifies a CNI provider against hundreds of different Network Policy scenarios, by defining similar truth table/policy combinations as demonstrated in the end to end tests, while also providing a hierarchical representation of policy "categories". We've found some interesting nuances and issues in almost every CNI we've tested so far, and have even contributed some fixes back.

To perform a Cyclonus validation run, you create a Job manifest similar to:

```yaml
apiVersion: batch/v1
kind: Job
metadata:
  name: cyclonus
spec:
  template:
    spec:
      restartPolicy: Never
      containers:
        - command:
            - ./cyclonus
            - generate
            - --perturbation-wait-seconds=15
            - --server-protocol=tcp,udp
          name: cyclonus
          imagePullPolicy: IfNotPresent
          image: mfenwick100/cyclonus:latest
      serviceAccount: cyclonus
```

Cyclonus outputs a report of all the test cases it will run:

```
test cases to run by tag:
- target: 6
- peer-ipblock: 4
- udp: 16
- delete-pod: 1
- conflict: 16
- multi-port/protocol: 14
- ingress: 51
- all-pods: 14
- egress: 51
- all-namespaces: 10
- sctp: 10
- port: 56
- miscellaneous: 22
- direction: 100
- multi-peer: 0
- any-port-protocol: 2
- set-namespace-labels: 1
- upstream-e2e: 0
- allow-all: 6
- namespaces-by-label: 6
- deny-all: 10
- pathological: 6
- action: 6
- rule: 30
- policy-namespace: 4
- example: 0
- tcp: 16
- target-namespace: 3
- named-port: 24
- update-policy: 1
- any-peer: 2
- target-pod-selector: 3
- IP-block-with-except: 2
- pods-by-label: 6
- numbered-port: 28
- protocol: 42
- peer-pods: 20
- create-policy: 2
- policy-stack: 0
- any-port: 14
- delete-namespace: 1
- delete-policy: 1
- create-pod: 1
- IP-block-no-except: 2
- create-namespace: 1
- set-pod-labels: 1
testing 112 cases
```

Note that Cyclonus tags its tests based on the type of policy being created, because the policies themselves are auto-generated, and thus have no meaningful names to be recognized by.

For each test, Cyclonus outputs a truth table, which is again similar to that of the E2E tests, along with the policy being validated:

```
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  creationTimestamp: null
  name: base
  namespace: x
spec:
  egress:
  - ports:
    - port: 81
    to:
    - namespaceSelector:
        matchExpressions:
        - key: ns
          operator: In
          values:
          - "y"
          - z
      podSelector:
        matchExpressions:
        - key: pod
          operator: In
          values:
          - a
          - b
  - ports:
    - port: 53
      protocol: UDP
  ingress:
  - from:
    - namespaceSelector:
        matchExpressions:
        - key: ns
          operator: In
          values:
          - x
          - "y"
      podSelector:
        matchExpressions:
        - key: pod
          operator: In
          values:
          - b
          - c
    ports:
    - port: 80
      protocol: TCP
  podSelector:
    matchLabels:
      pod: a
  policyTypes:
  - Ingress
  - Egress

0 wrong, 0 ignored, 81 correct
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| TCP/80 | X/A | X/B | X/C | Y/A | Y/B | Y/C | Z/A | Z/B | Z/C |
| TCP/81 |     |     |     |     |     |     |     |     |     |
| UDP/80 |     |     |     |     |     |     |     |     |     |
| UDP/81 |     |     |     |     |     |     |     |     |     |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| x/a    | X   | X   | X   | X   | X   | X   | X   | X   | X   |
|        | X   | X   | X   | .   | .   | X   | .   | .   | X   |
|        | X   | X   | X   | X   | X   | X   | X   | X   | X   |
|        | X   | X   | X   | X   | X   | X   | X   | X   | X   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| x/b    | .   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

```
| x/c    | .   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| y/a    | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| y/b    | .   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| y/c    | .   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| z/a    | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| z/b    | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| z/c    | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
|        | X   | .   | .   | .   | .   | .   | .   | .   | .   |
+--------+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

Both Cyclonus and the e2e tests use the same strategy to validate a Network Policy - probing pods over TCP or UDP, with SCTP support available as well for CNIs that support it (such as Calico).

As examples of how we use Cyclonus to help make CNI implementations better from a Network Policy perspective, you can see the following issues:

- Antrea: NetworkPolicy: unable to allow ingress by CIDR
- Calico: default missing protocol to TCP; don't let single port overwrite all ports
- Cilium: Egress Network Policy allows traffic that should be denied

The good news is that Antrea and Calico have already merged fixes for all the issues found and other CNI providers are working on it, with the support of SIG Network and the Network Policy subproject.

Are you interested in verifying NetworkPolicy functionality on your cluster? (if you care about security or offer multi-tenant SaaS, you should be) If so, you can run the upstream end to end tests, or Cyclonus, or both.

- If you're just getting started with NetworkPolicies and want to simply verify the "common" NetworkPolicy cases that most CNIs should be implementing correctly, in a way that is quick to diagnose, then you're better off running the e2e tests only.
- If you are deeply curious about your CNI provider's NetworkPolicy implementation, and want to verify it: use Cyclonus.
- If you want to test *hundreds* of policies, and evaluate your CNI plugin for comprehensive functionality, for deep discovery of potential security holes: use Cyclonus, and also consider running end-to-end cluster tests.
- If you're thinking of getting involved with the upstream NetworkPolicy efforts: use Cyclonus, and read at least an outline of which e2e tests are relevant.

Where to start with NetworkPolicy testing?

- Cyclonus is easy to run on your cluster, check out the instructions on github, and determine whether *your* specific CNI configuration is fully conformant to the hundreds of different Kubernetes Network Policy API constructs.
- Alternatively, you can use a tool like sonobuoy to run the existing E2E tests in Kubernetes, with the `--ginkgo.focus=NetworkPolicy` flag. Make sure that you use the K8s conformance image for K8s 1.21 or above (for example, by

using the `--kube-conformance-image-version v1.21.0` flag), as older images will not have the *new* Network Policy tests in them.

Improvements to the NetworkPolicy API and user experience

In addition to cleaning up the validation story for CNI plugins that implement NetworkPolicies, subproject contributors have also spent some time improving the Kubernetes NetworkPolicy API for a few commonly requested features. After months of deliberation, we eventually settled on a few core areas for improvement:

- Port Range policies: We now allow you to specify a *range* of ports for a policy. This allows users interested in scenarios like FTP or virtualization to enable advanced policies. The port range option for network policies will be available to use in Kubernetes 1.21. Read more in targeting a range of ports.
- Namespace as name policies: Allowing users in Kubernetes >= 1.21 to target namespaces using names, when building Network Policy objects. This was done in collaboration with Jordan Liggitt and Tim Hockin on the API Machinery side. This change allowed us to improve the Network Policy user experience without actually changing the API! For more details, you can read Automatic labelling in the page about Namespaces. The TL,DR; is that for Kubernetes 1.21 and later, **all namespaces** have the following label added by default:

  ```
  kubernetes.io/metadata.name: <name-of-namespace>
  ```

This means you can write a namespace policy against this namespace, even if you can't edit its labels. For example, this policy, will 'just work', without needing to run a command such as `kubectl edit namespace` . In fact, it will even work if you can't edit or view this namespace's data at all, because of the magic of API server defaulting.

```yaml
apiVersion: networking.k8s.io/v1
kind: NetworkPolicy
metadata:
  name: test-network-policy
  namespace: default
spec:
  podSelector:
    matchLabels:
      role: db
  policyTypes:
  - Ingress
  # Allow inbound traffic to Pods labelled role=db, in the namespace 'default'
  # provided that the source is a Pod in the namespace 'my-namespace'
  ingress:
  - from:
    - namespaceSelector:
        matchLabels:
          kubernetes.io/metadata.name: my-namespace
```

Results

In our tests, we found that:

- Antrea and Calico are at a point where they support all of cyclonus's scenarios, modulo a few very minor tweaks which we've made.
- Cilium also conformed to the majority of the policies, outside known features that aren't fully supported (for example, related to the way Cilium deals with pod CIDR policies).

If you are a CNI provider and interested in helping us to do a better job curating large tests of network policies, please reach out! We are continuing to curate the Network Policy conformance results from Cyclonus here, but we are not capable of maintaining all of the subtleties in NetworkPolicy testing data on our own. For now, we use github actions and Kind to test in CI.

The Future

We're also working on some improvements for the future of Network Policies, including:

- Fully qualified Domain policies: The Google Cloud team created a prototype (which we are really excited about) of FQDN policies. This tool uses the Network Policy API to enforce policies against L7 URLs, by finding their IPs and blocking them proactively when requests are made.
- Cluster Administrative policies: We're working hard at enabling *administrative* or *cluster scoped* Network Policies for the future. These are being presented iteratively to the NetworkPolicy subproject. You can read about them here in Cluster Scoped Network Policy.

The Network Policy subproject meets on mondays at 4PM EST. For details, check out the SIG Network community repo. We'd love to hang out with you, hack on stuff, and help you adopt K8s Network Policies for your cluster wherever possible.

A quick note on User Feedback

We've gotten a lot of ideas and feedback from users on Network Policies. A lot of people have interesting ideas about Network Policies, but we've found that as a subproject, very few people were deeply interested in implementing these ideas to the full extent.

Almost every change to the NetworkPolicy API includes weeks or months of discussion to cover different cases, and ensure no CVEs are being introduced. Thus, long term ownership is the biggest impediment in improving the NetworkPolicy user experience for us, over time.

- We've documented a lot of the history of the Network Policy dialogue here.
- We've also taken a poll of users, for what they'd like to see in the Network Policy API here.

We encourage anyone to provide us with feedback, but our most pressing issues right now involve finding *long term owners to help us drive changes*.

This doesn't require a lot of technical knowledge, but rather, just a long term commitment to helping us stay organized, do paperwork, and iterate through the many stages of the K8s feature process. If you want to help us and get involved, please reach out on the SIG Network mailing list, or in the SIG Network room in the k8s.io slack channel!

Anyone can put an oar in the water and help make NetworkPolices better!

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Kubernetes Blog

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Introducing the Windows Operational Readiness Specification

By **Jay Vyas (Tesla), Amim Knabben (Broadcom), Tatenda Zifudzi (AWS)** | Wednesday, April 03, 2024

Since Windows support graduated to stable with Kubernetes 1.14 in 2019, the capability to run Windows workloads has been much appreciated by the end user community. The level of and availability of Windows workload support has consistently been a major differentiator for Kubernetes distributions used by large enterprises. However, with more Windows workloads being migrated to Kubernetes and new Windows features being continuously released, it became challenging to test Windows worker nodes in an effective and standardized way.

The Kubernetes project values the ability to certify conformance without requiring a closed-source license for a certified distribution or service that has no intention of offering Windows.

Some notable examples brought to the attention of SIG Windows were:

- An issue with load balancer source address ranges functionality not operating correctly on Windows nodes, detailed in a GitHub issue: kubernetes/kubernetes#120033.
- Reports of functionality issues with Windows features, such as "GMSA not working with containerd, discussed in microsoft/Windows-Containers#44.
- Challenges developing networking policy tests that could objectively evaluate Container Network Interface (CNI) plugins across different operating system configurations, as discussed in kubernetes/kubernetes#97751.

SIG Windows therefore recognized the need for a tailored solution to ensure Windows nodes' operational readiness *before* their deployment into production environments. Thus, the idea to develop a Windows Operational Readiness Specification was born.

Can't we just run the official Conformance tests?

The Kubernetes project contains a set of conformance tests, which are standardized tests designed to ensure that a Kubernetes cluster meets the required Kubernetes specifications.

However, these tests were originally defined at a time when Linux was the *only* operating system compatible with Kubernetes, and thus, they were not easily extendable for use with Windows. Given that Windows workloads, despite their importance, account for a smaller portion of the Kubernetes community, it was important to ensure that the primary conformance suite relied upon by many Kubernetes distributions to certify Linux conformance, didn't become encumbered with Windows specific features or enhancements such as GMSA or multi-operating system kube-proxy behavior.

Therefore, since there was a specialized need for Windows conformance testing, SIG Windows went down the path of offering Windows specific conformance tests through the Windows Operational Readiness Specification.

Can't we just run the Kubernetes end-to-end test suite?

In the Linux world, tools such as Sonobuoy simplify execution of the conformance suite, relieving users from needing to be aware of Kubernetes' compilation paths or the semantics of Ginkgo tags.

Regarding needing to compile the Kubernetes tests, we realized that Windows users might similarly find the process of compiling and running the Kubernetes e2e suite from scratch similarly undesirable, hence, there was a clear need to provide a user-friendly, "push-button" solution that is ready to go. Moreover, regarding Ginkgo tags, applying conformance tests to Windows nodes through a set of Ginkgo tags would also be burdensome for any user, including Linux enthusiasts or experienced Windows system admins alike.

To bridge the gap and give users a straightforward way to confirm their clusters support a variety of features, the Kubernetes SIG for Windows found it necessary to therefore create the Windows Operational Readiness application. This application written in Go, simplifies the process to run the necessary Windows specific tests while delivering results in a clear, accessible format.

This initiative has been a collaborative effort, with contributions from different cloud providers and platforms, including Amazon, Microsoft, SUSE, and Broadcom.

A closer look at the Windows Operational Readiness Specification

The Windows Operational Readiness specification specifically targets and executes tests found within the Kubernetes repository in a more user-friendly way than simply targeting Ginkgo tags. It introduces a structured test suite that is split into sets of core and extended tests, with each set of tests containing categories directed at testing a specific area of testing, such as networking. Core tests target fundamental and critical functionalities that Windows nodes should support as defined by the Kubernetes specification. On the other hand, extended tests cover more complex features, more aligned with diving deeper into Windows-specific capabilities such as integrations with Active Directory. These goal of these tests is to be extensive, covering a wide array of Windows-specific capabilities to ensure compatibility with a diverse set of workloads and configurations, extending beyond basic requirements. Below is the current list of categories.

Category Name	Category Description
`Core.Network`	Tests minimal networking functionality (ability to access pod-by-pod IP.)
`Core.Storage`	Tests minimal storage functionality, (ability to mount a hostPath storage volume.)
`Core.Scheduling`	Tests minimal scheduling functionality, (ability to schedule a pod with CPU limits.)
`Core.Concurrent`	Tests minimal concurrent functionality, (the ability of a node to handle traffic to multiple pods concurrently.)
`Extend.HostProcess`	Tests features related to Windows HostProcess pod functionality.
`Extend.ActiveDirectory`	Tests features related to Active Directory functionality.
`Extend.NetworkPolicy`	Tests features related to Network Policy functionality.
`Extend.Network`	Tests advanced networking functionality, (ability to support IPv6)
`Extend.Worker`	Tests features related to Windows worker node functionality, (ability for nodes to access TCP and UDP services in the same cluster)

How to conduct operational readiness tests for Windows nodes

To run the Windows Operational Readiness test suite, refer to the test suite's `README` , which explains how to set it up and run it. The test suite offers flexibility in how you can execute tests, either using a compiled binary or a Sonobuoy plugin. You also have the choice to run the tests against the entire test suite or by specifying a list of categories. Cloud providers have the choice of uploading their conformance results, enhancing transparency and reliability.

Once you have checked out that code, you can run a test. For example, this sample command runs the tests from the `Core.Concurrent` category:

```
./op-readiness --kubeconfig $KUBE_CONFIG --category Core.Concurrent
```

As a contributor to Kubernetes, if you want to test your changes against a specific pull request using the Windows Operational Readiness Specification, use the following bot command in the new pull request.

```
/test operational-tests-capz-windows-2019
```

Looking ahead

We're looking to improve our curated list of Windows-specific tests by adding new tests to the Kubernetes repository and also identifying existing test cases that can be targetted. The long term goal for the specification is to continually enhance test coverage for Windows worker nodes and improve the robustness of Windows support, facilitating a seamless experience across diverse cloud environments. We also have plans to integrate the Windows Operational Readiness tests into the official Kubernetes conformance suite.

If you are interested in helping us out, please reach out to us! We welcome help in any form, from giving once-off feedback to making a code contribution, to having long-term owners to help us drive changes. The Windows Operational Readiness specification is owned by the SIG Windows team. You can reach out to the team on the Kubernetes Slack workspace **#sig-windows** channel. You can also explore the Windows Operational Readiness test suite and make contributions directly to the GitHub repository.

Special thanks to Kulwant Singh (AWS), Pramita Gautam Rana (VMWare), Xinqi Li (Google) and Marcio Morales (AWS) for their help in making notable contributions to the specification. Additionally, appreciation goes to James Sturtevant (Microsoft), Mark Rossetti (Microsoft), Claudiu Belu (Cloudbase Solutions) and Aravindh Puthiyaparambil (Softdrive Technologies Group Inc.) from the SIG Windows team for their guidance and support.

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Submitting articles to Kubernetes blogs

There are two official Kubernetes blogs, and the CNCF has its own blog where you can cover Kubernetes too. For the main Kubernetes blog, we (the Kubernetes project) like to publish articles with different perspectives and special focuses, that have a link to Kubernetes.

With only a few special case exceptions, we only publish content that hasn't been submitted or published anywhere else.

Writing for the Kubernetes blog(s)

As an author, you have three different routes towards publication.

Recommended route

The approach the Kubernetes project recommends is: pitch your article by contacting the blog team. You can do that via Kubernetes Slack (#sig-docs-blog). For articles that you want to publish to the contributor blog only, you can also pitch directly to SIG ContribEx comms.

Unless there's a problem with your submission, the blog team / SIG ContribEx will pair you up with:

- a blog *editor*
- your *writing buddy* (another blog author)

When the team pairs you up with another author, the idea is that you both support each other by reviewing the other author's draft article. You don't need to be a subject matter expert; most of the people who read the article also won't be experts. We, the Kubernetes blog team, call the other author a writing buddy.

The editor is there to help you along the journey from draft to publication. They will either be directly able to approve your article for publication, or can arrange for the approval to happen.

Read authoring a blog article to learn more about the process.

Starting with a pull request

The second route to writing for our blogs is to start directly with a pull request in GitHub. The blog team actually don't recommend this; GitHub is quite useful for collaborating on code, but isn't an ideal fit for prose text.

It's absolutely fine to open a placeholder pull request with just an empty commit, and then work elsewhere before returning to your placeholder PR.

Similar to the recommended route, we'll try to pair you up with a writing buddy and a blog editor. They'll help you get the article ready for publication.

Post-release blog article process

The third route is for blog articles about changes in Kubernetes relating to a release. Each time there is a release, the Release Comms team takes over the blog publication schedule. People adding features to a release, or who are planning other changes that the project needs to announce, can liaise with Release Comms to get their article planned, drafted, edited, and eventually published.

Article scheduling

For the Kubernetes blog, the blog team usually schedules blog articles to publish on weekdays (Gregorian calendar, as used in the USA and other countries). When it's important to publish on a specific date that falls on a weekend, the blog team try to accommodate that.

The section on authoring a blog article explains what to do:

- initially, don't specify a date for the article
- however, do set the article as draft (put `draft: true` in the front matter)

When the Prow bot merges the PR you write, it will be a draft and won't be set to publish. A Kubernetes contributor (either you, your writing buddy or someone from the blog team) then opens a small follow-up PR that marks it for publication. Merging that second PR releases the previously-draft article so that it can automatically publish.

On the day the article is scheduled to publish, automation triggers a website build and your article becomes visible.

Authoring an article

After you've pitched, we'll encourage you to use either HackMD (a web Markdown editor) or a Google doc, to share an editable version of the article text. Your writing buddy can read your draft text and then either directly make suggestions or provide other feedback. They should also let you know if what you're drafting feedback isn't in line with the blog guidelines.

At the same time, you'll normally be **their** writing buddy and can follow our guide about supporting their work.

Initial administrative steps

You should sign the CLA if you have not yet done so. It is best to make sure you start this early on; if you are writing as part of your job, you may need to check with the workplace legal team or with your manager, to make sure that you are allowed to sign.

Initial drafting

The blog team recommends that you either use HackMD (a web Markdown editor) or a Google doc, to prepare and share an initial, live-editable version of the article text.

> **Note:**
> If you choose to use Google Docs, you can set your document into Markdown mode.

Your writing buddy can provide comments and / or feedback for your draft text and will (or should) check that it's in line with the guidelines. At the same time, you'll be their writing buddy and can follow the guide that explains how you'll be supporting their work.

Don't worry too much at this stage about getting the Markdown formatting exactly right, though.

If you have images, you can paste in a bitmap copy for early feedback. The blog team can help you (later in the process), to get illustrations ready for final publication.

Markdown for publication

Have a look at the Markdown format for existing blog posts in the website repository in GitHub.

If you're not already familiar, read contributing basics. This section of the page assumes that you don't have a local clone of your fork and that you are working within the GitHub web UI. You do need to make a remote fork of the website repository if you haven't already done so.

In the GitHub repository, click the **Create new file** button. Name the file with the blog post in the format `/content/en/blog/_posts/YYYY/abbreviated-post-title.md`, where `…/YYYY/…` is the subfolder containing posts for the corresponding year. In case you need to add additional images, charts, etc. to your blog post, create a folder `/content/blog/en/blog/_posts/YYYY/abbreviated-post-title/` with the file `index.md` and additional files for your post.

Copy your existing content from HackMD or Google Docs, then paste it into the editor. There are more details later in the section about what goes into that file. Name the file to match the proposed title of the blog post, but don't put the date in the file name. The blog reviewers will work with you to set the final file name and the date when the article will be published.

1. When you save the file, GitHub will walk you through the pull request process.
2. Your writing buddy can review your submission and work with you on feedback and final details. A blog editor approves your pull request to merge, as a draft that is not yet scheduled.

Front matter

The Markdown file you write should use YAML-format Hugo front matter.

Here's an example:

```
---
layout: blog
title: "Your Title Here"
draft: true # will be changed to date: YYYY-MM-DD before publication
slug: lowercase-text-for-link-goes-here-no-spaces # optional
author: >
  Author-1 (Affiliation),
  Author-2 (Affiliation),
  Author-3 (Affiliation)
---
```

- initially, don't specify a date for the article or put any date placeholder into front matter (DON'T DO LIKE THIS ~~`date: XXXX-XX-XX`~~)
- however, do set the article as draft (put `draft: true` in the article front matter)

Article content

Make sure to use second-level Markdown headings (`##` not `#`) as the topmost heading level in the article. The `title` you set in the front matter becomes the first-level heading for that page.

You should follow the style guide, but with the following exceptions:

- we are OK to have authors write an article in their own writing style, so long as most readers would follow the point being made
- it is OK to use "we" in a blog article that has multiple authors, or where the article introduction clearly indicates that the author is writing on behalf of a specific group. As you'll notice from this section, although we avoid using "we" in our documentation, it's OK to make justifiable exceptions.
- we avoid using Kubernetes shortcodes for callouts (such as `{{< caution >}}`). This is because callouts are aimed at documentation readers, and blog articles aren't documentation.
- statements about the future are OK, albeit we use them with care in official announcements on behalf of Kubernetes
- code samples used in blog articles don't need to use the `{{< code_sample >}}` shortcode, and often it is better (easier to maintain) if they do not

Diagrams and illustrations

For illustrations, diagrams or charts, use the figure shortcode can be used where feasible. You should set an `alt` attribute for accessibility.

For illustrations and technical diagrams, try to use vector graphics. The blog team recommend SVG over raster (bitmap / pixel) diagram formats, and also recommend SVG rather than Mermaid (you can still capture the Mermaid source in a comment). The preference for SVG over Mermaid is because when maintainers upgrade Mermaid or make changes to diagram rendering, they may not have an easy way to contact the original blog article author to check that the changes are OK.

The diagram guide is aimed at Kubernetes documentation, not blog articles. It is still good to align with it but:

- there is no need to caption diagrams as Figure 1, Figure 2, etc.

The requirement for scalable (vector) images makes the process more difficult for less-familiar folks to submit articles; Kubernetes SIG Docs continues to look for ways to lower this bar. If you have ideas on how to lower the barrier, please volunteer to help out.

For other images (such as photos), the blog team strongly encourages use of `alt` attributes. It is OK to use an empty `alt` attribute if accessibility software should not mention the image at all, but this is a rare situation.

Commit messages

At the point you mark your pull request ready for review, each commit message should be a short summary of the work being done. The first commit message should make sense as an overall description of the blog post.

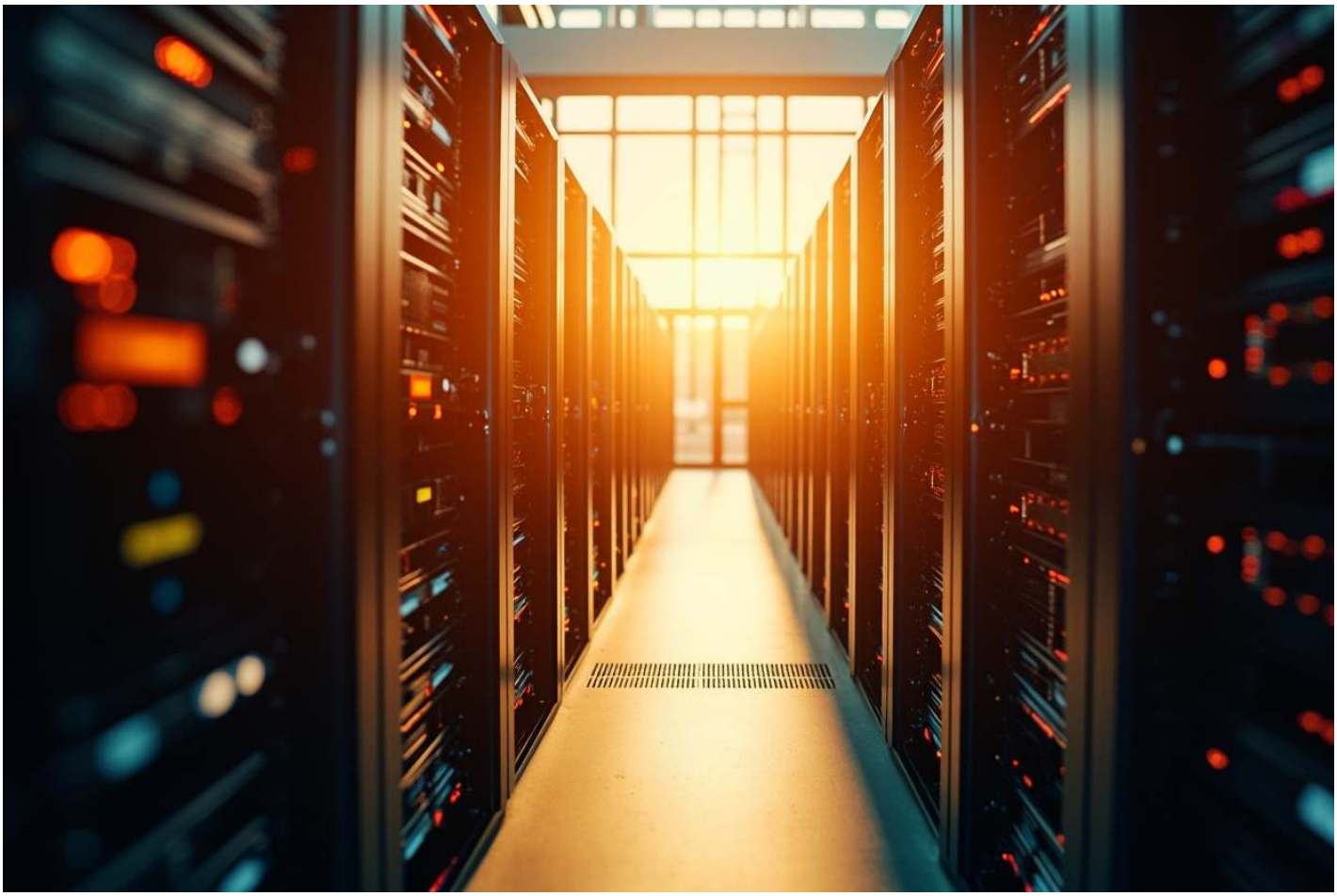
Examples of a good commit message:

- *Add blog post on the foo kubernetes feature*
- *blog: foobar announcement*

Examples of bad commit messages:

- *Placeholder commit for announcement about foo*
- *Add blog post*
- *asdf*
- *initial commit*
- *draft post*

Top Kubernetes Blogs You Should Follow



Finding the right *Kubernetes blog* can greatly improve your knowledge and skills. Here are some of the top Kubernetes blogs, offering a range of insights and expertise. This list includes both well-known resources and some hidden gems that provide unique perspectives.

- **Kubernetes.io Blog:** The official Kubernetes blog. It offers announcements, feature releases, and community updates. It's a primary source for anyone working with Kubernetes.
- **The Cloud Native Computing Foundation (CNCF) Blog:** This blog covers a wide range of cloud-native technologies, including Kubernetes. It features articles on best practices, case studies, and industry trends.
- **Sysdig Blog:** Focuses on Kubernetes security, monitoring, and troubleshooting. It provides tutorials, webinars, and in-depth articles on securing and optimizing Kubernetes environments.
- **Aqua Security Blog:** Dedicated to cloud-native security, with a strong emphasis on Kubernetes. Offers insights into vulnerability management, compliance, and runtime protection.
- **Learnk8s:** Provides practical tutorials and guides for Kubernetes. This *Kubernetes blog* is particularly useful for those looking to improve their hands-on skills.

- **Kubegrade Blog:** While exploring these expert resources, remember that Kubegrade offers practical solutions for simplifying K8s cluster management, enabling efficient monitoring, upgrades, and optimization. The Kubegrade blog complements these resources by providing insights into streamlined K8s operations.

These blogs offer a wealth of information and can help you stay informed about the latest developments in the Kubernetes community. Exploring different *Kubernetes blog* options allows you to find the resources that best fit your needs.

Contactar

www.linkedin.com/in/ajojea (LinkedIn)
launchpad.net/~itsuugo (Other)
github.com/aojea (Other)

Aptitudes principales

Open-Source Software
Cloud-Native Architecture
Infrastructure as a Service (IaaS)

Languages

Spanish
Portuguese (Limited Working)
English

Certifications

Program Committee Member: KubeCon + CloudNativeCon Europe 2023
Track Chair: KubeCon + CloudNativeCon North America 2025
Program Committee Member: KubeCon + CloudNativeCon North America 2022
Speaker: KubeCon + CloudNativeCon North America 2024
Cloud Native Telco Day EU 2025 Speaker Badge

Publications

Open Source Ecosystem Evolution: OpenStack and Kubernetes models
Midonet Scalability Report
Automating Linux Network Performance Testing
The Flux Operator

Antonio Ojea

Networking and Kubernetes
Área metropolitana de Oporto

Extracto

Clouds, containers, open source, and networks mostly.

Experiencia

Google
3 años 5 meses

Senior Staff Software Engineer
noviembre de 2025 - Present (4 meses)

Staff Software Engineer
mayo de 2024 - noviembre de 2025 (1 año 7 meses)
Porto, Portugal

Software Engineer
octubre de 2022 - mayo de 2024 (1 año 8 meses)

Cloud Native Computing Foundation (CNCF)
Tech Lead for TAG Infrastructure
junio de 2025 - Present (9 meses)

Red Hat
2 años 4 meses

Principal Software Engineer
julio de 2021 - septiembre de 2022 (1 año 3 meses)
Redondela, Galicia, Spain

Senior Software Engineer
junio de 2020 - julio de 2021 (1 año 2 meses)

Networks, Linux, Clouds, Containers, Kubernetes, ...

SUSE
Engineering Manager
enero de 2018 - mayo de 2020 (2 años 5 meses)
Redondela, Galicia, Spain

* Managing geo-diverse and remote teams working in Kubernetes and Openstack.
* Leading by example, contributing upstream and implementing software development best practices.
* Speaker at Kubecon and OpenStack Summits.

Midokura
2 años 6 meses

Director Of Engineering
abril de 2017 - octubre de 2017 (7 meses)
Barcelona

* Lead several teams of engineers in different countries working in an Agile environment
* Analyze technology, resource needs, and market demand, to plan and assess the feasibility of projects
* Create a homogeneous environment within teams, sharing development, testing and operations skills across

Engineering Manager
mayo de 2015 - marzo de 2017 (1 año 11 meses)
Barcelona y alrededores, España

* Managed performant and geo-diverse teams
* Quality Control and Testing: scalability, performance
* Software development best practices: CI, CD, ATDD

Retegal
Telecommunications Engineer
diciembre de 2002 - mayo de 2015 (12 años 6 meses)

Retegal is a public company and a subsidiary of the Regional Government of Galicia, responsible for delivering telecom services over its own infrastructure in the Galicia region. Retegal operates a large and heterogeneous telecom network offering services to public enterprises and private operators.

* Designing and maintaining high-availability and critical systems and networks
* Managing big telecommunications projects
* Training and mentoring of company staff

Educación

University of Vigo

Master of Advances Studies, Computer Systems Networking and Telecommunications · (2004 - 2006)

University of Vigo

Telecommunications Engineer · (1995 - 2001)

12/05/2025

To Whom It May Concern,

My name is Antonio Ojea, and I serve as a Senior Staff Engineer at Google. It is with enthusiasm that I write this letter in support of Mr. Amim Moises Salum Knabben and his documented work in network security for Kubernetes, a leading system for managing computer applications. I am familiar with the technical contribution he co-authored, titled "Defining Network Policy Conformance for Container Network Interface (CNI) providers," published on the official Kubernetes.io blog on April 20, 2021. This article was co-authored with Matt Fenwick (Synopsys), Jay Vyas (VMware), Ricardo Katz, Douglas Schilling Landgraf (Red Hat), and Christopher Tomkins (Tigera).

In this publication, Mr. Knabben and his co-authors addressed a significant challenge in the management of Kubernetes networks. They explained that many different "Container Network Interface" (CNI) providers, which enable applications to communicate over a network, were being developed. Each of these tools implemented network security rules, called "Network Policies," in slightly different ways. For example, some used a standard system called "iptables," while others used entirely different technologies. This led to confusion for users trying to set up secure networks and highlighted a need for a clear, reliable way to ensure network security for applications running in Kubernetes.

The work co-authored by Mr. Knabben described a practical solution to these issues by creating a system to validate Network Policies. Before this period, while Kubernetes had some tests for Network Policies, they were not regularly run or easy to understand. To improve this scenario, the authors developed a new validation tool within the Kubernetes "end-to-end" (e2e) testing framework. This tool allows for a visual check of how Network Policies affect applications. The tests show a grid where a dot indicates a permitted connection and an "X" indicates a blocked connection, making it easier to detect and fix errors, such as a documented problem in which network traffic was incorrectly blocked even after security rules were removed.

This contribution is not limited to a publication in a blog; the work is currently integrated into the core Kubernetes project and is being tested. Mr. Knabben is listed as an "approver" in the Kubernetes code repository, specifically for Network Policy tests. An approver is a recognized expert with the authority to review and clear code changes. This role directly connects him to the maintenance and evolution of these critical security tests. The work is also part of an official "testgrid," which is a system that continuously runs these Network Policy tests to ensure everything works correctly. These elements demonstrate that the publication is tied to active, continuously verified code and is a part of the official Kubernetes development process.

The scope of testing described in this work is extensive. The system validates about 30 common scenarios through these end-to-end tests. A tool called Cyclonus runs 112 test cases and generates detailed results across many Network Policy scenarios. This systematic approach helped uncover issues in several major CNI providers, including problems with how network access was granted in Antrea, how default communication protocols were handled in Calico, and how security rules in Cilium sometimes allowed traffic that should have been blocked. The materials indicate that Antrea and Calico have already fixed these issues, and other providers are working on similar improvements with support from the Kubernetes community.

Antonio Ojea

The concepts and practices presented in Mr. Knabben's publication have also influenced the development of Kubernetes itself. This work has led to improvements in Network Policy rules, such as allowing security rules to cover a range of network ports (for advanced use cases like file transfers) and enabling users to apply rules to groups of applications by name. The official Kubernetes documentation, which serves as a guide for users, now incorporates concepts and examples from this work, including how to set default security rules and manage isolation across applications.

The publication also reaches a broad professional audience. It is featured on the official Kubernetes.io blog, which is read by tens of thousands of software developers, security engineers, and Kubernetes operators worldwide. The Kubernetes.io website itself receives hundreds of thousands of visits annually. The audience impacted by this work includes the global Kubernetes community. These companies provide CNI tools (such as Antrea, Calico, and Cilium), security teams in large organizations implementing advanced security measures, and major cloud providers (such as Google Cloud, AWS, and Azure) that use Network Policies in their services.

Additionally, Mr. Knabben's contribution has been recognized by respected organizations and experts. It was published on the official Kubernetes blog, which is overseen by the Cloud Native Computing Foundation, a leading authority in cloud technologies. The article explicitly acknowledges key individuals from major technology companies, including Google, Red Hat, Tigera, and VMware, for their support and collaboration in resolving CNI issues. The continuous integration of these tests into the official test grid means that contributors and vendors constantly use this work to validate their implementations. Furthermore, Mr. Knabben's status as an approver in the Kubernetes repository is a distinction given to contributors who have demonstrated exceptional technical expertise and ongoing commitment in this area.

From my perspective as someone explicitly acknowledged for supporting this work and collaborating in the resolution of issues in different CNIs over time, these elements demonstrate that the article "Defining Network Policy Conformance for Container Network Interface (CNI) providers," co-authored by Mr. Amim Moises Salum Knabben, is a professional publication that documents an original, systematically tested, and widely adopted contribution in Kubernetes Network Policy conformance and security.

I strongly support this application and will provide additional information if necessary.

Sincerely,

Antonio Ojea
Senior Staff Engineer, Google
linkedin.com/in/ajojea/
github.com/aojea

Exhibit H. Display of the person’s work in the field in Public Exhibitions

This badge was issued to Amim Knabben

Date issued: November 04, 2022

Verify Celebrate

Speaker: KubeCon + CloudNativeCon North America 2022

Issued by The Linux Foundation

Earners of this badge are speakers, selected by the KubeCon + CloudNativeCon North America Co-Chairs, who have provided thought-leadership and shared best practices with attendees during their talk(s) at KubeCon + CloudNativeCon North America. They are Open Source and Cloud Native Technology Subject Matter Experts on the topic(s) they presented. Learn more about KubeCon + CloudNativeCon North America at https://bit.ly/2SB8jrk

Learn more

Experience Intermediate Years Free

Skills

Subject Matter Expert In Diversity In Open Source Softw... Thought Leadership

Earning Criteria

Speaker at KubeCon + CloudNativeCon North America

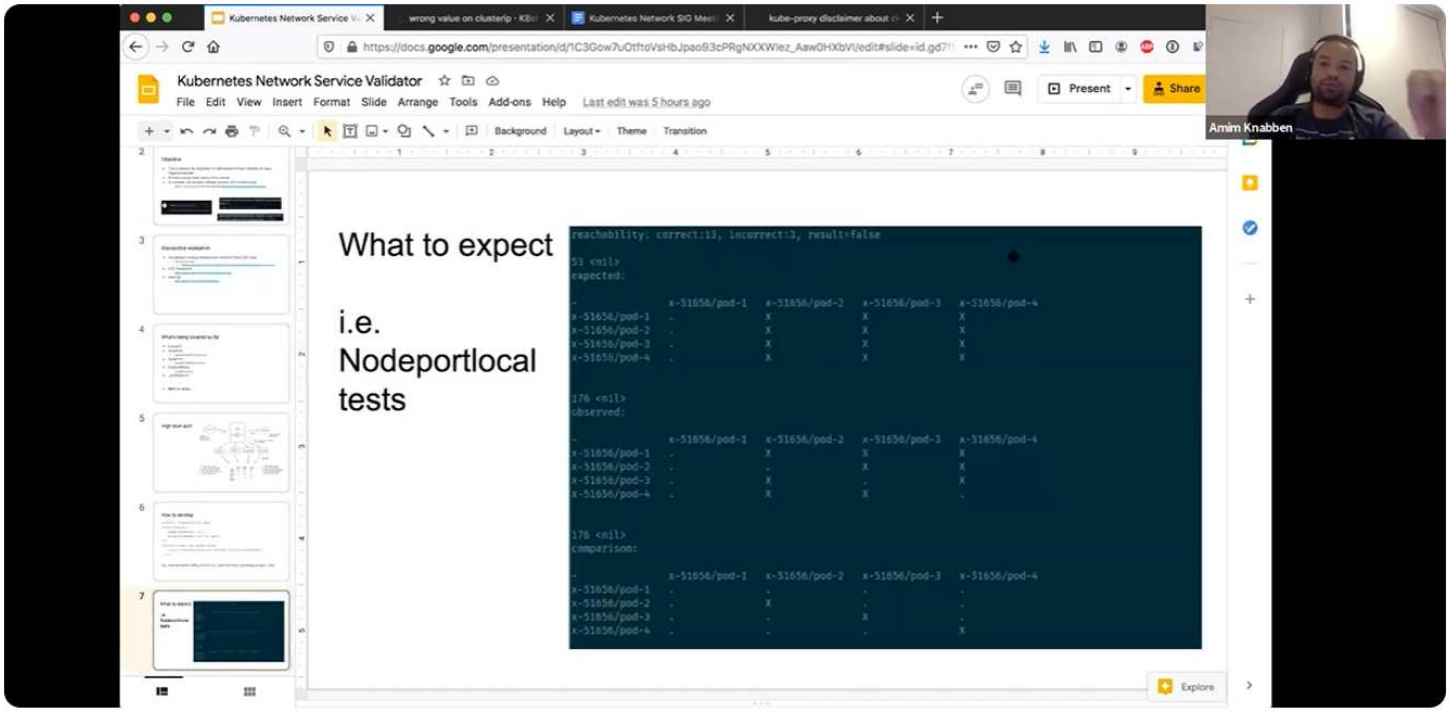
Related

Speaker: KubeCon + CloudNative Con Europ...

Speaker: KubeCon + CloudNative Con China...

Speaker: KubeCon + CloudNative Con + Ope...

Pesquisar



Kubernetes SIG Network meeting 20210527

Kubernetes
23,8 mil inscritos

Inscrever-se

2 | Compartilhar | Salvar | Clipe | Download

Link for the video

KubeCon CloudnativeCon North America 2022
Detroit 2022

Mr. Knabben as a speaker alongside Xinqi Li

https://www.youtube.com/watch?v=V3Us2IYjq8k

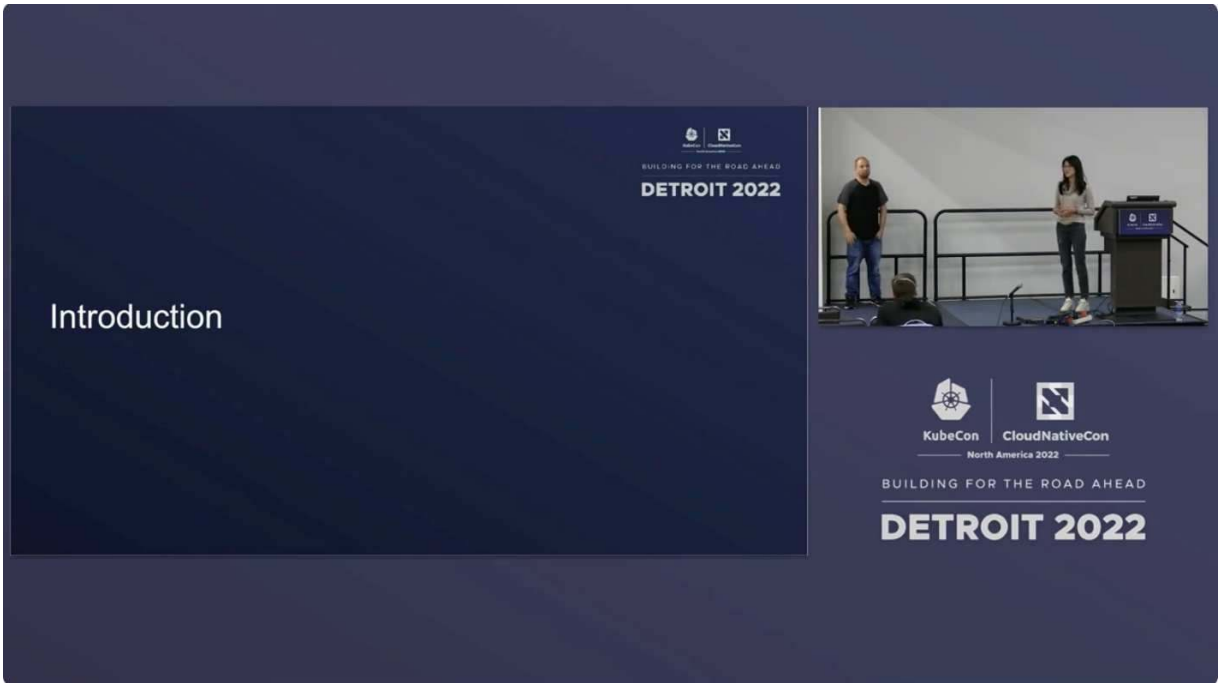


Exhibit I. Evidence that the person has performed in a leading or critical role for organizations or establishments of distinguished reputation

Contact

www.linkedin.com/in/shashank-girish (LinkedIn)

Top Skills

Management
Leadership
Coaching & Mentoring

Languages

English (Native or Bilingual)
Kannada (Native or Bilingual)
Hindi (Limited Working)

Certifications

Leadership principles (Harvard Business School Online)
Management Essentials (Harvard Business School Online)

Shashank Girish

Engineering Manager | Passionate | Tech Enthusiast | VMware
Bengaluru, Karnataka, India

Summary

Hello! I'm Shashank Girish, a seasoned professional with over 11+ years of experience in the world of software engineering and engineering management.

In 2021, I joined VMware's Tanzu Kubernetes Grid (TKG) team. As an Engineering Manager leading a team of 7+ members, I've led the development and delivery of multiple TKGm product releases at a regular cadence. I've worked with and mentored a number of talented engineers during this time, while also learning from them at the same time.

During and after the acquisition of VMware by Broadcom, I helped navigate the team through various challenges such as changes in mindset, culture, and uncertainty. This also included driving the migration of our product build and release machinery through the various system level changes that occur during an acquisition.

On a community front, I've helped volunteer at community events like Kubernetes Community Days and Kubernetes meetups in Bangalore in 2023, and KuberTENes Bangalore in 2024 (celebrating a decade of Kubernetes!)

Experience

VMware
4 years 10 months

Engineering Manager
July 2022 - Present (3 years 8 months)
Bengaluru, Karnataka, India

Leading and Managing Tanzu Kubernetes Grid (TKG) teams

* Currently leading teams working on the development of multiple areas within TKGm, including open source components and release engineering.

* Helped drive development of regular TKG Core releases at a monthly cadence.
* Delivered multiple TKGm releases including the latest Kubernetes versions.

Senior Member Of Technical Staff
May 2021 - August 2022 (1 year 4 months)
Bengaluru, Karnataka, India

Helped start and build the Tanzu Kubernetes Grid (TKG) Release Engineering team in India. The team was able ramp up, expand, improve upon the delivery processes and automation scripts in short span of time. We were delivering TKGs releases independently within 3 months of being formed, and TKG Core releases within 6 months!

Cisco
Software Engineer
July 2019 - May 2021 (1 year 11 months)

Intersight Orchestrator
• Primary role as a software engineer, and Scrum Master of a 14-member team.
• Go (Golang) used to develop orchestration features for a SAAS infrastructure management platform.
• Analyze requirements, design technical solutions and discuss with fellow teammates.
• Write and test code to attain solutions required by customers, using micro service architecture.
• Continuously assess and experiment with new technology to figure out what is best suited for the requirement.
• As scrum master, I interact with stake-holders to understand customer requirements, and translate them to create meaningful user stories that add value to users.
• Working with Docker, Kubernetes, Open-APIs, MongoDB, Kafka and Netflix Conductor.

Cloud Workflow Orchestrator & Service Catalogue
• Primary role as a Go (Golang) programmer in a newly formed team to develop a cloud service catalogue and workflow orchestrator.
• Write and test code designed for micro service architecture.
• Some of the technologies used are Docker, Kubernetes, Swagger, Kafka and gRPC.

• MongoDB used for the service catalogue, and ArangoDB used for the workflow orchestrator.

Nokia
R&D Engineer (Software Engineer)
January 2015 - July 2019 (4 years 7 months)

Network Operations Master (Sep 2018 – July 2019)

• Primarily played the role of Go (Golang) & Java developer in a newly formed team, building a cloud-based network management system from scratch.
• Developed cloud native network management system with a micro-service architecture.
• Working with Docker, Docker-compose, Kubernetes, Swagger, Helm and various other emerging technologies.
• Continuously researching new technology stacks and to see what solution would fit the technological problem best.
• Kanban method of development & DevOps mode of operation followed.

Network Element Compatibility & Diagnostics System (January 2015 – September 2018)

• Primary role as a Java developer, and Scrum Master in a 6-member team for 2 years.
• Worked with a small self-sufficient team, writing software programs that help analyze telecom network-elements' compatibility and diagnose compatibility issues with management software.
• Consistently wrote Java code, unit test cases, and integration test cases.
• Played the role of a code reviewer, helping reviewing code of my fellow team mates.
• Wrote test automation for my user-stories using Robot Framework.
• Tested my software features, and provided user documentation inputs to technical writers.
• Helped maintain code and enhance legacy software products from time to time.
• As part of this role, I performed responsibilities such as interacting with customers, requirement gathering, and feature pre-study analysis.
• Handled a rotating technical customer support role on multiple occasions.
• Helped build machine setup and maintenance with Perl, Python and shell scripting.
• Actively involved in user story discussions, grooming, code reviews and feature demos.

Cognizant Technology Solutions
Programmer Analyst
September 2013 - January 2015 (1 year 5 months)

Mobile Web Application for leading American Credit Card company.

• Working as a java developer – handling development as part of a 3-member team.

• Main responsibilities were to write code and unit tests for a mobile web application in Java.

• Also maintained legacy desktop software application

• Java Spring Framework 3.0 based web application for mobile devices.

• Agile method of development used.

Education

Liverpool John Moores University
Master of Science - MS, Data Science · (January 2021 - December 2022)

International Institute of Information Technology Bangalore
Postgraduate Degree, Data Science · (January 2021 - February 2022)

PESIT - Bangalore South Campus
Bachelor of Engineering (B.E.), Electrical, Electronics and Communications Engineering · (2009 - 2013)

December 16, 2025
Shashank Girish
Engineering Manager

To USCIS,

My name is Shashank Girish, and I serve as an Engineering Manager for Tanzu Kubernetes Grid teams within the Tanzu R&D Engineering division, now part of Broadcom Inc., following the acquisition of VMware. In this role, I have been directly involved in the engineering management context in which the Tanzu R&D Engineering Top Performer Achievement Award for FY24Q4 was granted to Amim Moises Salum Knabben.

I hold a Bachelor of Engineering degree in Electrical, Electronics, and Communications Engineering from PESIT Bangalore South Campus, completed between 2009 and 2013. In 2021 and 2022, I completed a postgraduate degree in Data Science at the International Institute of Information Technology, Bangalore, and a Master of Science in Data Science at Liverpool John Moores University. Over more than eleven years in software engineering and engineering management, I have worked as a Programmer Analyst at Cognizant Technology Solutions, as an R&D Engineer at Nokia, as a Software Engineer at Cisco, and as a Senior Member of Technical Staff and later Engineering Manager in the Tanzu Kubernetes Grid organization at VMware, and now at Broadcom. I also completed the Management Essentials and Leadership Principles programs at Harvard Business School Online in 2023. This background provides the basis for my evaluation of Mr. Knabben's award and performance within our Tanzu R&D Engineering division.

Broadcom Inc. (NASDAQ: AVGO) is a multinational American technology company that designs, develops, and supplies semiconductors and infrastructure software solutions. The Tanzu R&D Engineering division that granted the Tanzu R&D Engineering Top Performer Achievement Award - FY24Q4 is part of Broadcom Software and is headquartered in Palo Alto, California. In November 2023, Broadcom completed the acquisition of VMware for $ 69 billion, one of the most significant technology-sector transactions. In December 2024, Broadcom became the twelfth company to surpass $ 1 trillion in market value. The organization serves approximately 80 percent of Fortune 500 companies and maintains exceptionally high standards for engineering excellence in serving enterprise mission-critical customers.

Within this context, Mr. Knabben received this award from the Tanzu R&D Engineering business unit at Broadcom, which was officially communicated by the company's executive leadership and management through formal notification and internal channels. The criteria for this award are rigorous and based on excellence in technical performance, measurable impact on product delivery, and outstanding contributions to the objectives of the company's engineering division. The basis for Mr. Knabben's recognition rewards the leadership in supporting the transformation of the team's knowledge infrastructure, delivering two product releases on schedule during a fiscal year in which the team was operating with only 15 percent of its original headcount, the assumption of responsibilities to unblock critical release issues by taking ownership for product launches in AMER time zones, and support to the team in reducing the average time to resolve the problems from sixty days to less than thirty days through proactive engagement with engineering.

Moreover, the criteria emphasize deep technical expertise and active incident response. The award recognizes that Mr. Knabben demonstrated profound technical knowledge and

proactive involvement in addressing and mitigating critical customer escalations for Tanzu Kubernetes Grid multi-cloud, working in functional areas with limited technical coverage where key enterprise customers were experiencing production problems and resolving them rapidly. These contributions align with the core areas of Mr. Knabben's specialization in Kubernetes and cloud infrastructure: delivering multiple Tanzu Kubernetes Grid releases, including Kubernetes versions 1.27, 1.29, and 1.30; engineering reliability; resolving complex problems in distributed systems; and responding to production issues affecting enterprise customers.

The Tanzu R&D Engineering Top Performer award is highly competitive within our organization. The Tanzu R&D Engineering division employs hundreds of highly qualified engineers worldwide. The recognition is reserved for only a small percentage of engineers. During the relevant period, only 10 engineers across the entire unit received the Top Performer award. Given that the division is embedded in an organization that serves about 80 percent of Fortune 500 companies and operates critical infrastructure products, competition for this recognition involves elite engineers working on cloud-native and infrastructure software. The award to Mr. Knabben included both formal recognition and a monetary spot bonus, recorded internally as a local bonus of 6,200 BRL (approximately 1,170 USD at the time), as well as internal communications such as an email from executive leadership congratulating recipients, Google Chat conversations, and slides presented in division-wide meetings summarizing the award.

In addition, there is a record of other recognitions that Mr. Knabben received within VMware through the *"At Our Best"* employee recognition program, where colleagues actively exchange electronic cards to express appreciation for contributions to projects, brainstorming sessions, or work anniversaries, highlighting how peers value the way he brings his talents to generate value for projects, team,s and the organization. These recognitions complement the formal Tanzu R&D Engineering Top Performer Achievement Award by documenting peer and management appreciation in our engineering environment.

Consequently, based on the documented criteria, the competitive nature of the Tanzu R&D Engineering Top Performer Achievement Award for FY24Q4, and the measurable impact described in the internal materials, I confirm that this recognition reflects excellence in technical performance and impact within Broadcom's Tanzu R&D Engineering division and is directly connected to Mr. Knabben's core professional specialization in enterprise Kubernetes platforms, cloud infrastructure and reliability engineering.

I strongly support this application and will provide additional information if necessary.

Sincerely,

Shashank Girish
Engineering Manager, Tanzu Kubernetes Grid (TKG), Broadcom Inc.
shashank.girish@broadcom.com
(+91) 9686595157

Contact

www.linkedin.com/in/jayunit100 (LinkedIn)
careers.stackoverflow.com/jayunit100 (Other)
jayunit100.blogspot.com (Blog)

Top Skills

golang
Google Kubernetes Engine (GKE)
Amazon Web Services (AWS)

Publications

Core Kubernetes
20+ Software and Cloud Technology Patents
...10+ Publications in NCBI peer reviewed journals...

Jay Vyas

Engineering @ Tesla !
Mountain View, California, United States

Summary

- Staff engineer @ Tesla
- Kubernetes maintainer
- Always turn my camera on
- Author of "Core Kubernetes" (Manning)
- PhD in biomedical sciences (bioinformatics)
- 50 patents, 10 peer reviewed publications
- Apache Software Foundation member/PMC
- ex sig windows lead, implemented defauls ns labels, network policy conformance, and many other k8s improvements, commiter across several apache/cncf project.

Experience

Tesla
Staff Software Engineer
October 2023 - Present (2 years 5 months)

Working on our internal Vehicle Engineering software platforms.

VMware
4 years 4 months

Staff Software Engineer
June 2021 - October 2023 (2 years 5 months)
Massachusetts, United States

Tech lead for multiple teams, initiatives:
- TKG Nodes (GPU, windows, CNI, and OSImage hardening)
- "Thick" Edge on TKG retail edge sites Lead
- Release engineering lead for TKG on an as needed basis to keep delivery on track.
- TL for TKG Windows: Windows nodes for K8s via cluster-api.
- SmE on several Sev1 k8s product technical escalations (military , government,...)
- Squashed guru / code nit culture wherever I could.

Member of Technical Staff

July 2019 - June 2021 (2 years)
Massachusetts, United States

Upstream aligned tech lead for our Tanzu Kubernetes Grid platform.... Implemented and wrote business critical KEPs that kept kubernetes and VMWare healthy and reliable...

- Built TKG's Kubernetes on Windows and defined windows conformance https://github.com/kubernetes/enhancements/issues/2578
- started and implemented windows Conformance initiative in upstream k8s https://github.com/kubernetes/enhancements/tree/master/keps/sig-windows/2578-windows-conformance
- made Network Policy Validation a "thing" for k8s that was standardized https://github.com/kubernetes/enhancements/tree/master/keps/sig-network/1611-network-policy-validation
- implemented Default Namespace labels: https://github.com/kubernetes/enhancements/tree/master/keps/sig-api-machinery/2161-apiserver-default-labels feature in k8s

Platform9 Systems
Software Engineer
January 2019 - July 2019 (7 months)

K8s Engineering on the PMK and Managed Apps platforms.

- Architected observability and metrics.
- Internal training around Kubernetes core principles.
- K8s consulting work our largest customers
- Built developer tooling and selinux tooling for SE's in the field (https://github.com/platform9/new-go-app, https://github.com/platform9/selinuxmodules)
- Prototyped our move to tracing (jaeger) for our node backend.

Synopsys Inc
Principal Engineer, Cloud Native Chief Architect, Consultant
May 2017 - April 2019 (2 years)

- Built our initial Kubernetes offering as a SaaS on Google Cloud, migrated 20 (or so) initial core customers. It's now in the 1000s.
- Merged the technology stacks of Synopsys/Blackduck after acquisition to work together (i.e. binary analysis for contianers that ran on blackduck etc....).

- Post full time : Continued as a consulting engagement, continued advising senior leadership, VP and Directors towards the ongoing R&D strategy for our cloud native app delivery models for the broader Synopsys/Blackduck teams.

Red Hat
Principal Software Engineer
November 2012 - May 2017 (4 years 7 months)
Wesftord, MA

- implemented features in Kubernetes core, scheduling, and e2e contributor, maintainer.
- Major contributor to the Hadoop ecosystem and its role in the GlusterFS community.
- Original automation of the HA (kcm & scheduling) lease arch for upstream K8s.
- Big Data: Contributed several enhancements to projects in the Apache Software foundation (including Hadoop, Spark, BigTop, ...)
- Storage/Emerging Technologies: Enablement of bigdata workloads on various filesystems with difference CAP and semantic properties.
- Implemented predicate caching in the upstream k8s scheduler to enable 100+ node openshift clusters w 1000s of apps.
- Did the 1st implementation of spark and cassandra on kubernetes ; working out kinks of SparkStreaming etc on k8s.

Brandwatch Peerindex
BigData Engineer (Hadoop, EMR, ML platforms)
May 2011 - November 2012 (1 year 7 months)
London, United Kingdom and Hartford CT

- Built Hadoop pipelines for terabytes of ingest from concept->prototype->deployment on our DAG MapReduce platform (implementing RDD style data transformations in the pre spark era).
- Took over and maintained PISAE (Peerindex social action engine) platform.
- Development of our backend MapReduce java systems - largely based on ingestion and feature extraction.
- Scaled our ETL pipeline for social data to manage millions of social interactions, including key-value storage (DynamoDB) for our frontends.

UConn Health
Open-Source Bioinformatics Developer Java Developer & Researcher
August 2007 - December 2011 (4 years 5 months)

- Developer/designer of a highly interactive client side application for fully integrated molecular visualization platform (VENN) which allows for Jmol based 3D analysis of protein evolutionary conservation (See Publications).

- Created a cross platform VM for NMR data processing (vagrant, virtualbox, and ubuntu).

- Deployed plug-in based modules for implementation of molecular analysis algorithms in a single computational proteomics framework.

- Optimized and changed features of the application to suit emergent needs, such as protein domain oriented analyses.

- Data Warehousing/Modelling of Functional Minimotifs

- Designed a Hibernate API and MySQL data repository along with an java based which integrated proteomic information spanning protein motifs, functional annotations, taxonomy data, sequences, and protein domains.

- Architected an Expert System (MIMOSA) which automatically implemented various text mining and correlation scoring algorithms using ontologies for 5,000,000 publically available medical abstracts.

- Developed a plug in oriented Graphical User Interface using the Java Swing framework which enabled database driven, high throughput annotation of "minimotifs".

- Collaborated on several database aspects of the NIH funded, publically available, web based Minimotif miner application (http://mnm.engr.uconn.edu).

- Engineered Java API's for reading/writing of large, binary FID representations present in vendor-specific NMR spectral data types in support of an open-source translation and conversion API.

- Prototyped a Swing-based workflow building environment (time domain NMR data proc, as a custom 2D graphical app allowing on the fly creation of data-processing "actors", w/ reloadable and persistent state and associated, workflows which triggered offline data processing tasks.

- Design and architecture of an integrated NMR visual data mining platform, as part of the Rudolf project using and Clojure to wrap existing Java API's.

Rudolf Inc
Founder
2004 - 2010 (6 years)
London, United Kingdom ; Hartford CT ;

- Reverse engineering of UML design for various specifications in accountancy systems.
- Design of custom LISP /Python applications for ensuring transaction completeness in large, distributed MySQL systems.
- Evaluation of e-commerce solutions (i.e. google checkout, paypal) with home grown product inventory and management systems.
- Rapid software prototying, informatics consulting, and helping individuals get up to speed with data mining and machine learning related initiatives.
- See also work at Peerindex, above - which contracted through Rudolf Inc. for bigdata consulting for a portion of my work there.

Community Health Resources
Java EE / Hibernate developer for medical informatics applications
2005 - 2006 (1 year)
CT

Java Engineer working on medical informatics software applications :
Retooled a legacy software system built on proprietary software libraries into a homegrown, dynamic Java EE Servlet/JSP MVC framework with a backend system that dynamically mapped objects onto database stored procedures using runtime injection. Backend system was successfully deployed and completed in a short period of time - and the engineers that took this project over were quite happy with its modular design which allowed them to easily introduce static components or changes into the data model without needing to recompile, rebuild, or even redeploy the system.

Education

University of Connecticut
Doctor of Philosophy (PhD), Bioinformatics · (2007 - 2011)

Rensselaer Polytechnic Institute
Master of Science (MS), Computer Science · (2004 - 2006)

University of Arizona

Bachelor's degree, Mathematics (Computer Science) · (2001 - 2004)

University of Arizona

Bachelor's degree, Mathematics

University of San Francisco

Jay Vyas
Staff Software Engineer, Tesla
Former Staff Software Engineer,
Broadcom SIG Windows Emeritus
Tech-Lead

December 17, 2025

To Whom It May Concern,

I respectfully submit this letter to provide information regarding the critical and leadership role performed by Mr. Amim Moises Salum Knabben within organizations and technical communities of distinguished reputation, including the Kubernetes project. I serve as a Staff Software Engineer at Tesla, previously held the position of Staff Software Engineer at Broadcom, and currently act as SIG Windows Emeritus Technical Lead in the Kubernetes community. In these capacities, I directly supervised and worked closely with Mr. Knabben on large-scale enterprise infrastructure initiatives, allowing me to evaluate his contributions firsthand both as his manager and as a senior technical peer..

Between 2022 and 2023, while at VMware, Inc. (now a subsidiary of Broadcom Inc)., Mr. Knabben served as Windows Technical Lead for the Tanzu Kubernetes Grid (TKG) multicloud platform, with primary responsibility for the Windows offering within TKGm. He was the sole Windows Tech Lead for a product used by Fortune 500 customers, with authority to define the technical roadmap in collaboration with Product Managers and Engineering Managers. He secured technical design approval through Tanzu Enhancement Proposals and made architectural decisions for Windows Kubernetes in demanding enterprise environments. In August 2023, he became Node Tech Lead for Kubernetes nodes within the VMware platform, expanding his scope from Windows-only to the entire node stack across Linux and Windows, and directly supervising eight engineers.

While performing as Windows Tech Lead, Mr. Knabben operated autonomously and negotiated priorities with external stakeholders, including the Antrea and Beijing teams. One example of his impact is the first Tanzu Kubernetes Grid Hybrid OS Cluster, which supports Linux and Windows in the same cluster. He assumed technical leadership for the design and delivery of this capability, leading the approval of a Tanzu Enhancement Proposal, implementing automated testing workflows, and producing architecture guidance and training materials. The resulting feature enabled enterprises to run Windows and Linux workloads within a single Kubernetes cluster, reducing operational complexity and infrastructure costs. This work was critical to maintaining competitiveness with Azure AKS and AWS EKS, supporting customer retention, and expanding VMware’s market presence in Windows-dependent environments.

Mr. Kanbben also led the implementation of air-gapped Windows support in internet-restricted environments and upgrades to Photon 5 and Ubuntu 22.04 in the
Incheon release. His contributions were formally recognized by Engineering Managers and Product Managers and are properly documented in Tanzu release notes and reviewed Tanzu

enhancement proposals. Outside the organization, he achieved the status of Emeritus Kubernetes SIG Windows Tech Lead, became a Kubernetes Organization Member with review authority over official GitHub repositories, and spoke at KubeCon + CloudNativeCon North America 2022 on Windows Operational Readiness. His technical work is cited in official VMware and Broadcom documentation, including public Tanzu Kubernetes Grid documentation, and has been used in enterprise marketing and sales materials.

At VMware and Broadcom, Mr. Knabben delivered infrastructure training to hundreds of engineers and field personnel worldwide and participated in product roadmap planning for Tanzu Kubernetes Grid, a platform generating millions of dollars in annual revenue. His advancement from Antrea CNI Package Maintainer to Windows Technical Lead and later Node Technical Lead, along with his promotion to Staff Software Engineer, reflects sustained organizational recognition of his critical role. Within the Kubernetes community, his election as SIG Windows Technical Lead and subsequent **Emeritus** designation granted him direct influence over the upstream Windows roadmap and ongoing collaboration with senior engineers from Microsoft and Google.

For these reasons, it is my professional judgment that Mr. Amim Moises Salum Knabben has performed leading and critical roles for VMware, Inc. in connection with the Tanzu Kubernetes Grid platform, a product of significant commercial and strategic importance. His responsibilities and technical leadership were central to the platform's functionality, competitiveness, and adoption in enterprise environments, and his contributions continue to have a lasting impact both within VMware/Broadcom and across the broader Kubernetes ecosystem, including the Cloud Native Computing Foundation community.

Sincerely,

Jay Vyas
Staff Software Engineer, Tesla
Former Staff Software Engineer,
Broadcom SIG Windows Emeritus Tech-Lead
jvyas@tesla.com
9784054461

Contact

www.linkedin.com/in/shashank-girish (LinkedIn)

Top Skills

Management
Leadership
Coaching & Mentoring

Languages

English (Native or Bilingual)
Kannada (Native or Bilingual)
Hindi (Limited Working)

Certifications

Leadership principles (Harvard Business School Online)
Management Essentials (Harvard Business School Online)

Shashank Girish

Engineering Manager | Passionate | Tech Enthusiast | VMware
Bengaluru, Karnataka, India

Summary

Hello! I'm Shashank Girish, a seasoned professional with over 11+ years of experience in the world of software engineering and engineering management.

In 2021, I joined VMware's Tanzu Kubernetes Grid (TKG) team. As an Engineering Manager leading a team of 7+ members, I've led the development and delivery of multiple TKGm product releases at a regular cadence. I've worked with and mentored a number of talented engineers during this time, while also learning from them at the same time.

During and after the acquisition of VMware by Broadcom, I helped navigate the team through various challenges such as changes in mindset, culture, and uncertainty. This also included driving the migration of our product build and release machinery through the various system level changes that occur during an acquisition.

On a community front, I've helped volunteer at community events like Kubernetes Community Days and Kubernetes meetups in Bangalore in 2023, and KuberTENes Bangalore in 2024 (celebrating a decade of Kubernetes!)

Experience

VMware
4 years 10 months

Engineering Manager
July 2022 - Present (3 years 8 months)
Bengaluru, Karnataka, India

Leading and Managing Tanzu Kubernetes Grid (TKG) teams

* Currently leading teams working on the development of multiple areas within TKGm, including open source components and release engineering.

* Helped drive development of regular TKG Core releases at a monthly cadence.
* Delivered multiple TKGm releases including the latest Kubernetes versions.

Senior Member Of Technical Staff
May 2021 - August 2022 (1 year 4 months)
Bengaluru, Karnataka, India

Helped start and build the Tanzu Kubernetes Grid (TKG) Release Engineering team in India. The team was able ramp up, expand, improve upon the delivery processes and automation scripts in short span of time. We were delivering TKGs releases independently within 3 months of being formed, and TKG Core releases within 6 months!

Cisco
Software Engineer
July 2019 - May 2021 (1 year 11 months)

Intersight Orchestrator
• Primary role as a software engineer, and Scrum Master of a 14-member team.
• Go (Golang) used to develop orchestration features for a SAAS infrastructure management platform.
• Analyze requirements, design technical solutions and discuss with fellow teammates.
• Write and test code to attain solutions required by customers, using micro service architecture.
• Continuously assess and experiment with new technology to figure out what is best suited for the requirement.
• As scrum master, I interact with stake-holders to understand customer requirements, and translate them to create meaningful user stories that add value to users.
• Working with Docker, Kubernetes, Open-APIs, MongoDB, Kafka and Netflix Conductor.

Cloud Workflow Orchestrator & Service Catalogue
• Primary role as a Go (Golang) programmer in a newly formed team to develop a cloud service catalogue and workflow orchestrator.
• Write and test code designed for micro service architecture.
• Some of the technologies used are Docker, Kubernetes, Swagger, Kafka and gRPC.

• MongoDB used for the service catalogue, and ArangoDB used for the workflow orchestrator.

Nokia
R&D Engineer (Software Engineer)
January 2015 - July 2019 (4 years 7 months)

Network Operations Master (Sep 2018 – July 2019)

• Primarily played the role of Go (Golang) & Java developer in a newly formed team, building a cloud-based network management system from scratch.
• Developed cloud native network management system with a micro-service architecture.
• Working with Docker, Docker-compose, Kubernetes, Swagger, Helm and various other emerging technologies.
• Continuously researching new technology stacks and to see what solution would fit the technological problem best.
• Kanban method of development & DevOps mode of operation followed.

Network Element Compatibility & Diagnostics System (January 2015 – September 2018)

• Primary role as a Java developer, and Scrum Master in a 6-member team for 2 years.
• Worked with a small self-sufficient team, writing software programs that help analyze telecom network-elements' compatibility and diagnose compatibility issues with management software.
• Consistently wrote Java code, unit test cases, and integration test cases.
• Played the role of a code reviewer, helping reviewing code of my fellow team mates.
• Wrote test automation for my user-stories using Robot Framework.
• Tested my software features, and provided user documentation inputs to technical writers.
• Helped maintain code and enhance legacy software products from time to time.
• As part of this role, I performed responsibilities such as interacting with customers, requirement gathering, and feature pre-study analysis.
• Handled a rotating technical customer support role on multiple occasions.
• Helped build machine setup and maintenance with Perl, Python and shell scripting.
• Actively involved in user story discussions, grooming, code reviews and feature demos.

Cognizant Technology Solutions
Programmer Analyst
September 2013 - January 2015 (1 year 5 months)

Mobile Web Application for leading American Credit Card company.

• Working as a java developer – handling development as part of a 3-member team.

• Main responsibilities were to write code and unit tests for a mobile web application in Java.

• Also maintained legacy desktop software application

• Java Spring Framework 3.0 based web application for mobile devices.

• Agile method of development used.

Education

Liverpool John Moores University
Master of Science - MS, Data Science · (January 2021 - December 2022)

International Institute of Information Technology Bangalore
Postgraduate Degree, Data Science · (January 2021 - February 2022)

PESIT - Bangalore South Campus
Bachelor of Engineering (B.E.), Electrical, Electronics and Communications Engineering · (2009 - 2013)

December 8,

2025 To USCIS,

I write in support of Mr. Amim Knabben's application based on his role as Group Tech Lead for the Tanzu Kubernetes Grid (TKGm) product at Broadcom Inc., formerly VMware, from September 2024 to June 2025. My name is Shashank Girish, an Engineering Manager at Broadcom. In this position, I had the opportunity to follow Mr. Knabben’s work closely, and I am equipped to provide you with further information about his contributions to the company.

Mr. Knabben served as Group Tech Lead for the Tanzu Kubernetes Grid product line, which generated annual revenue of millions of dollars year over year. He provided technical guidance to a cross-functional team of more than 30 professionals, including software engineers, senior engineers, and engineering managers. These professionals were organized into five specialized product areas: Support teams; Security; GPU and Windows; Kubernetes and Release Engineering; Networking and Infrastructure Integration; and Cluster Framework, Upgrade, and Testing.

Mr. Knabben held executive decision-making authority and worked directly with the Director of Engineering and the Senior Director of Product to build roadmaps grounded in technical specifications and customer requirements. He had final authority over critical architectural decisions that impacted enterprise customers globally. He also delivered three consecutive critical releases of TKGm, specifically versions 2.5.2, 2.5.3, and 2.5.4, within nine months despite the team being reduced to only 15 percent of its original size because of restructuring.

Under his technical direction, the product adopted a new strategic capability to support five Kubernetes versions simultaneously, up from the previous limit of three, while maintaining service continuity for Fortune 500 customers. He also led the complete migration of the development infrastructure from GitLab to GitHub, achieving this with zero downtime for customers and minimal impact on production releases. In addition, he led the complete handover of the project to the HCL team through daily pairing sessions, ensuring a structured transfer of knowledge and responsibilities.

Mr. Knabben’s work had a direct, measurable impact on the product's stability and performance during a particularly challenging post-acquisition transformation period following Broadcom’s acquisition of VMware. One of the most significant outcomes of his leadership was a reduction in the average time to resolve customer escalations by approximately 80 percent, bringing it from 60 days to consistently less than 3 days before receiving engineering action. He achieved this through direct technical intervention in production outages and by personally working on areas that previously had limited technical coverage. He also assumed critical release responsibilities in the AMER time zone to unblock complex technical issues, helping ensure on-time delivery commitments and maintaining service levels for enterprise customers during one of the most challenging phases in the product's history.

During the post-acquisition transition at Broadcom Inc. following its acquisition of VMware, Mr. Knabben performed a critical leadership role that executive management identified as essential to the continuity and stability of the Tanzu Kubernetes Grid product line. Despite an approximately 85 percent reduction in team size, he led the successful delivery of multiple consecutive product releases, an outcome senior engineering and product leadership described as unattainable without his technical direction. Internal records from support and customer success teams document a substantial reduction in customer escalation resolution time, from approximately sixty days to three days, directly attributed to his hands-on technical leadership and proactive crisis management, resulting in markedly improved customer satisfaction.

Mr. Knabben's leadership is further documented through public product release notes and official Broadcom technical documentation describing key architectural implementations delivered under his direction. Enterprise and government customers, including Fortune 500 companies and U.S. federal agencies, provided documented feedback confirming that product stability, operational continuity, and successful migrations during this period depended directly on his leadership. His appointment as Group Technical Lead for TKGm, a role reserved for highly trusted senior engineers with direct engagement with executive leadership, reflects sustained institutional recognition of his importance. These facts demonstrate that Mr. Knabben performed a leading and critical role for a Fortune 500 company of distinguished reputation in connection with a revenue-generating platform of significant strategic value.

Based on all of the above, I endorse that Mr. Amim Moises Salum Knabben performed a genuinely critical and highly impactful leadership role within a major global technology company, with documented outcomes that were essential to the continuity and success of an enterprise product used by large corporate and governmental customers.

Sincerely,

Shashank Girish
Engineering Manager
Broadcom Inc.

Contact

www.linkedin.com/in/vkorbes (LinkedIn)
lk.cool (Personal)

Top Skills

Go
Kubernetes
Linux

V Körbes

Product Manager
Berlin Metropolitan Area

Experience

Broadcom
Technology Product Manager
November 2024 - Present (1 year 3 months)

VMware
Senior Product Line Manager
February 2022 - November 2024 (2 years 10 months)

Tilt Dev
2 years 2 months

Head of Product
March 2021 - December 2021 (10 months)

Developer Relations
November 2019 - March 2021 (1 year 5 months)

garden.io
Developer Relations
June 2018 - November 2019 (1 year 6 months)
Berlin Area, Germany

Keyrus
Systems Analyst III
April 2018 - June 2018 (3 months)
Florianópolis Area, Brazil

Software Freedom Conservancy
Software Developer - Kubernetes SIG-CLI
November 2017 - February 2018 (4 months)

Education

Senac Santa Catarina
Technician, Linux System Administration · (2004 - 2005)

Senac Santa Catarina

Technician, Linux Computer Networks · (2003 - 2003)

Senac Santa Catarina

Technician, 3D Architectural Visualization · (2006 - 2007)

December 2, 2025

To the U.S.A. Immigration Officer,

My name is Ellen Perito Körbes, and I am a Senior Product Manager. I am writing this letter in support of Mr. Amim Moises Salum Knabben. I worked with Mr. Knabben on security triage for product vulnerabilities, serving as the product manager responsible for vulnerability screening and gathering requirements while he worked directly on the product's engineering and hardening. In our group structure, the broader leadership chain progressed from Tech Lead Windows, to Tech Lead Security, to Tech Lead Group. In this context, Mr. Knabben held a key leadership role in security for a flagship Broadcom product.

Mr. Knabben served as the TKG Security Tech Lead for the Tanzu Kubernetes Grid product at Broadcom Inc., a Fortune 500 company and global leader in enterprise software infrastructure with annual revenue exceeding $ 35 billion. He was responsible for architecting and leading critical security solutions implementations for Kubernetes infrastructure used by high-level federal and enterprise customers, including United States government agencies that require compliance with the Security Technical Implementation Guide and the CIS benchmarks.

Mr. Knabben exercised technical leadership with full decision-making authority over the security strategy for the TKG multi-cloud product. His responsibilities included having final approval over security architecture and the technical roadmap for the product, coordinating a cross-functional team of four security and product engineers, leading critical compliance initiatives focused on CIS and STIG for United States federal clients, and driving technical innovation through the development and refactoring of automated tools for CVE scanning and validation pipelines. He also interacted directly with Directors, Project Managers, and Engineering Managers to align these security initiatives with broader product and business goals.

Mr. Knabben's contributions were essential for the success of Tanzu Kubernetes Grid and for Broadcom's positioning in highly regulated markets. One concrete example was his leadership in delivering fully hardened Kubernetes nodes that met CIS and STIG requirements for the Halifax release of TKG, achieving an average compliance rate of 75 percent. This hardened release was a prerequisite for Broadcom to commercialize Tanzu Kubernetes Grid to United States federal agencies, which represent a multibillion-dollar market, as well as to the private sector. This work directly enabled Broadcom to offer a product that met the strict security and compliance standards required by these customers.

A second example of his impact was his complete refactoring of the CVE scanning system. Mr. Knabben implemented automated CI/CD pipelines using Jenkins with integrated alerts. This automation significantly reduced the time required to detect and respond to security vulnerabilities. As a result, thousands of Kubernetes clusters in production environments were better protected, and the generation of security reports became more agile and reliable for our teams and customers.

Another critical contribution of his work was the expansion of the TKG platform. For the Incheon release, Mr. Knabben led the expansion of support to Photon 5 and Ubuntu 22.04, which meaningfully increased the number of eligible customers for Tanzu Kubernetes Grid and improved the product's market competitiveness.

The initiatives that Mr. Knabben led had substantial visibility and business impact. His leadership of the hardening and security compliance initiative for Tanzu Kubernetes Grid, a

flagship Broadcom product, was a critical subproject for the General Availability release of TKG. This meant delivering a final and stable version ready to operate in mission-critical environments. The work had maximum executive visibility and involved direct presentations to directors, project managers, and engineering managers, as well as transfer sessions to global support teams responsible for thousands of enterprise and government customers.

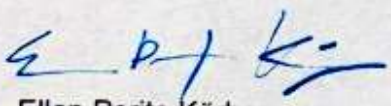
In the broader market context, this security and compliance work enabled Broadcom to enter the lucrative United States federal sector by achieving STIG and CIS compliance and significantly expanded the Total Addressable Market for Tanzu Kubernetes Grid. The sharp reduction of CVEs and the automated hardening that Mr. Knabben drove positioned TKG competitively against products such as Red Hat OpenShift and Rancher, offering a differentiated security advantage for highly regulated enterprise customers.

The importance of this role within Broadcom is also reflected in the company's standing in the technology sector. Broadcom Inc. is a Fortune 500 company with a ranking of around 120 and annual revenue above $ 35 billion, serving more than 200,000 companies worldwide, including 98 percent of Fortune 500 companies. In 2023, Broadcom completed one of the most significant technology acquisitions in history by acquiring VMware for $ 69 billion, consolidating its status as an essential provider of critical infrastructure to United States government agencies, global financial institutions, and telecommunications providers. The company employs approximately 50,000 people worldwide and is recognized as a leader across multiple Gartner Magic Quadrants in cloud infrastructure and virtualization.

In this highly demanding environment, Mr. Knabben's performance in his security leadership role directly led to a significant professional opportunity. Based on his work as Security Tech Lead, I understand he was promoted to Node Tech Lead at Broadcom in July 2024. This position expanded his leadership scope while still encompassing security leadership. This internal recognition is consistent with the importance and quality of his contributions to the Tanzu Kubernetes Grid product and to Broadcom's broader strategic objectives in security and compliance.

From my perspective as a peer responsible for product vulnerability triage, working directly with Mr. Knabben on product engineering and hardening, his work was critical for enabling Tanzu Kubernetes Grid to meet stringent security requirements and compete effectively in regulated markets, particularly in the United States. His decisions and leadership directly affected the security posture of thousands of Kubernetes clusters in production. They enabled Broadcom to access federal and enterprise customers that demand high levels of assurance.

Sincerely,



Ellen Perito Körbes

Senior Product Manager
Email: ellenkorbes@gmail.com
Phone: +49 1726067256

Amim Knabben
Broadcom Inc. - Tanzu Division
R&D Engineering Top Performer

Thanks for bringing your best

at our best

To: Amim Moises Salum Knabben

I wanted to take a moment to express my heartfelt gratitude for the incredible collaboration we've shared while working closely together in the node team. Your expertise, and positive spirit have truly made a significant impact in image-builder and CVE scanning tools, and I feel privileged to have had the opportunity to work alongside you. Your attention to detail about OVA-Hardening and inspec control tests for CIS/STIG compliance and willingness to keep me up to speed have not only contributed to the success of my work but have also inspired me to strive for my next career level.

From: Ming Ying Li
Received On 08/31/2023

Reply to Sender
Print a copy

vmware

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Tanzu Kubernetes Grid Compliance and Hardening 2.5

STIG Results and Exceptions

Last Updated May 27, 2025

This topic shows default-level STIG (V1R8) scan results for Tanzu Kubernetes Grid (TKG) workload clusters deployed by a standalone management cluster, and describes exception handling that can improve the scan results.

For standard processes to further harden TKG workload clusters, see STIG and NSA/CISA Hardening.

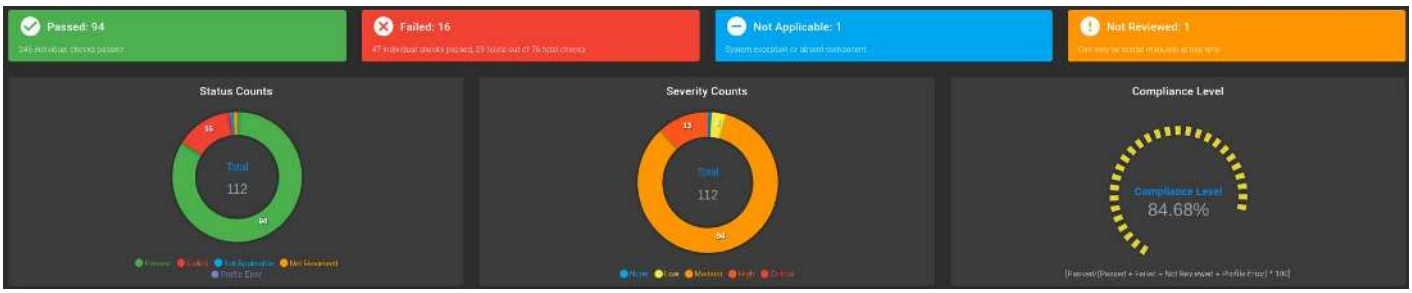
> **Important**
>
> The information in this topic only applies to Tanzu Kubernetes Grid with standalone management clusters. If you are using TKGS with vSphere Supervisor (formerly known as vSphere with Tanzu), see the vSphere with Tanzu STIG Hardening Reports.

Hardening Class-Based Workload Clusters

STIG scan results for class-based workload clusters deployed without the additional Kubernetes or OS hardening described in Hardening Class-Based Workload Clusters.

Default Photon OS 5 STIG Exceptions

Photon OS 5 Scan Results:



STIG Exceptions documentation and compensating controls for Photon OS 5 in class-based TKG clusters:

STIG ID	Description	Reason	Workaround
PHTN-50-000005	The Photon operating system must display the Standard Mandatory DOD Notice and Consent Banner before granting local or remote access to the system.	Not applicable	Enable with `run_sshd_banner` and `run_etc_issue_dod` options
PHTN-50-000013	The Photon operating system must have the OpenSSL FIPS provider installed to protect the confidentiality of remote access sessions.	Photon FIPS is not enabled by default.	Enable with `run_openssl_fips_install` and `run_openssl_fips` options
PHTN-50-000046	The Photon operating system must require authentication upon booting into single-user and maintenance modes.	Not recommended	Enable with `run_grub_boot_password` option
PHTN-50-000111	The Photon operating system must off-load audit records onto a different system or media from the system being audited.	Real-time logs offload is provided by the fluentbit package.	Install and configure fluentbit package
PHTN-50-000121	The Photon operating system must be configured to synchronize with an authoritative DOD time source.	NTP servers must be configured separately	Follow the instructions on this KB article
PHTN-50-000182	The Photon operating system must implement NIST FIPS-validated cryptography for the following: to provision digital signatures, to generate cryptographic hashes, and to protect unclassified information requiring confidentiality and cryptographic protection in accordance with applicable federal laws, Executive Orders, directives, policies, regulations, and standards.	Photon FIPS is not enabled by default.	Enable with `run_fips_boot_enable` option
PHTN-50-000231	The Photon operating system must not perform IPv4 packet forwarding.	Not applicable	IPv4 forwarding is required for TKG components
PHTN-50-000237	The Photon operating system must configure AIDE to detect changes to baseline configurations.	AIDE is not enabled by default	Enable with `run_aide_config` option

Default Ubuntu 2x.04 STIG Exceptions

Ubuntu OS 2x.04 Scan Results:

STIG Exceptions documentation and compensating controls for Ubuntu OS 2x.04 in class-based TKG clusters:

STIG ID	STIG Description	Reason	Workaround
V-238197	The Ubuntu operating system must enable the graphical user logon banner to display the Standard Mandatory DoD Notice and Consent Banner before granting local access to the system via a graphical user logon.	GUI is NOT installed on TKG	Not applicable
V-238198	The Ubuntu operating system must display the Standard Mandatory DoD Notice and Consent Banner before granting local access to the system via a graphical user logon.	GUI is NOT installed on TKG	Not applicable
V-238199	The Ubuntu operating system must retain a user's session lock until that user reestablishes access using established identification and authentication procedures.	GUI is NOT installed on TKG	Not applicable
V-238201	The Ubuntu operating system must map the authenticated identity to the user or group account for PKI-based authentication.	ClusterAPI VM does not support pam-pkcs11 for authentication	Not applicable
V-238229	The Ubuntu operating system, for PKI-based authentication, must validate certificates by constructing a certification path	ClusterAPI VM does not support pam-pkcs11 for authentication	Not applicable
V-238232	The Ubuntu operating system must electronically verify Personal Identity Verification (PIV) credentials.	ClusterAPI VM does not support pam-pkcs11 for authentication	Not applicable
V-238233	The Ubuntu operating system for PKI-based authentication, must implement a local cache of revocation data in case of the inability to access revocation information via the network.	ClusterAPI VM does not support pam-pkcs11 for authentication	Not applicable
V-238306	The Ubuntu operating system audit event multiplexor must be configured to off-load audit logs onto a different system or storage media from the system being audited.	Real-time logs offload is provided by the fluentbit package.	Install and configure fluentbit package

STIG ID	STIG Description	Reason	Workaround
V-238307	The Ubuntu operating system must immediately notify the SA and ISSO (at a minimum) when allocated audit record storage volume reaches 75% of the repository maximum audit record storage capacity.	TKG does not support remote email integration by default	Install prometheus and configure prometheus alerting
V-238321	The Ubuntu operating system must have a crontab script running weekly to offload audit events of standalone systems.	Real-time logs offload is provided by the fluentbit package.	Install and configure fluentbit package
V-238331	The Ubuntu operating system must automatically expire temporary accounts within 72 hours.	Emergency accounts are not supported and should not exist on TKG since the box is immutable. Capv is an infrequently used account.	Not applicable
V-238335	Ubuntu operating systems handling data requiring ???data at rest??? protections must employ cryptographic mechanisms to prevent unauthorized disclosure and modification of the information at rest.	ClusterAPI VM does not support disk encryption	FS must encrypted on VSAN
V-238336	The Ubuntu operating system must deploy Endpoint Security for Linux Threat Prevention (ENSLTP).	TKG does not support the installation of third party licensed McAffee software	Not applicable
V-238356	The Ubuntu operating system must, for networked systems, compare internal information system clocks at least every 24 hours with a server which is synchronized to one of the redundant United States Naval Observatory (USNO) time servers, or a time server designated for the appropriate DoD network (NIPRNet/SIPRNet), and/or the Global Positioning System (GPS).	NTP servers must be configured separately	Follow the instructions on this KB article
V-238361	The Ubuntu operating system must allow the use of a temporary password for system logons with an immediate change to a permanent password.	Password is not supported on TKG, access is made via SSH and keys installed via CAPI.	Not applicable

STIG ID	STIG Description	Reason	Workaround
V-238362	The Ubuntu operating system must be configured such that Pluggable Authentication Module (PAM) prohibits the use of cached authentications after one day.	This requires smart card authentication. TKG does not support this setup.	Not applicable
V-238365	Ubuntu operating system must implement cryptographic mechanisms to prevent unauthorized modification of all information at rest.	ClusterAPI VM does not support disk encryption	FS must encrypted on VSAN
V-238366	Ubuntu operating system must implement cryptographic mechanisms to prevent unauthorized disclosure of all information at rest.	ClusterAPI VM does not support disk encryption	FS must encrypted on VSAN
V-238367	The Ubuntu operating system must configure the uncomplicated firewall to rate-limit impacted network interfaces.	Rate Limit for NIC is configured using UFW, this firewall is inactive on TKG and not supported.	Not applicable
V-238379	The Ubuntu operating system must disable the x86 Ctrl-Alt-Delete key sequence if a graphical user interface is installed.	GUI is NOT installed on TKG	Not applicable

STIG Exceptions with BYOI OS Hardening

STIG exceptions for Ubuntu OS 2x.04 in class-based TKG clusters with custom (Bring Your Own Image) hardened OVA, created by running Image Builder with the `ansible_user_vars` settings for STIG hardening described in Build a Linux Image:

STIG ID	STIG Description	Reason	Workaround
V-238214	The Ubuntu operating system must display the Standard Mandatory DoD Notice and Consent Banner before granting any local or remote connection to the system.	The DoD SSH banner is not installed by default, but a workaround presents a way to enable it.	Must recreate the node with **install_sshd_login_banner=true** enabled.
V-238216	The Ubuntu operating system must configure the SSH daemon to use Message Authentication Codes (MACs) employing FIPS 140-2	Ubuntu FIPS is not supported.	Not supported.
V-238217	The Ubuntu operating system must configure the SSH daemon to use FIPS-140-2 approved ciphers	Ubuntu FIPS is not supported.	Not supported.
V-238236	The Ubuntu operating system must be configured so that the script which runs each 30 days or less to check file integrity is the default one.	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled and copy the example script: `sudo cp -f /usr/share/aide/config/cron.daily/aide /etc/cron.daily/aide`

STIG ID	STIG Description	Reason	Workaround
V-238303	The Ubuntu operating system must use cryptographic mechanisms to protect the integrity of audit tools.	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled.
V-238358	The Ubuntu operating system must notify designated personnel if baseline configurations are changed in an unauthorized manner.	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled.
V-238363	The Ubuntu operating system must implement NIST FIPS-validated	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled.
V-238364	The Ubuntu operating system must use DoD PKI-established certificate authorities for verification of the establishment of protected sessions.	DoD Certificate Authority chain is not installed by default	Customers running on a DoD network must install the CA chain, and recreate the node with **remove_existing_ca_certs=true**
V-238371	The Ubuntu operating system must use a file integrity tool to verify correct operation of all security functions.	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled.
V-238372	The Ubuntu operating system must notify designated personnel if baseline configurations are changed in an unauthorized manner	AIDE is not installed or enabled by default	Must recreate the node with **install_aide=true** enabled.

STIG Exceptions with Kubernetes Hardening

Kubernetes Scan Results:

Control plane nodes:

Worker nodes:

STIG exceptions for Kubernetes in class-based TKG clusters with Kubernetes hardened using the configuration file variable settings listed in STIG Hardening:

STIG ID	STIG Description	Reason	Workaround
V-242376	The Kubernetes Controller Manager must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.		This can be resolved by setting SECURITY_MINIMUM_TLS_PROTOCOL. Valid values `tls_1.2` or `tls_1.3`.
V-242377	The Kubernetes Scheduler must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.		This can be resolved by setting SECURITY_MINIMUM_TLS_PROTOCOL. Valid values `tls_1.2` or `tls_1.3`.
V-242378	The Kubernetes API Server must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.		This can be resolved by setting SECURITY_MINIMUM_TLS_PROTOCOL. Valid values `tls_1.2` or `tls_1.3`.
V-242390	The Kubernetes API server must have anonymous authentication disabled.		This can be resolved by setting APISERVER_EXTRA_ARGS.
V-242403	Kubernetes API Server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.		This can be resolved by setting ENABLE_AUDIT_LOGGING: true
V-242409	Kubernetes Controller Manager must disable profiling.		This is set by default. To manually override this default set KUBE_CONTROLLER_MANAGER_EXTRA_ARGS
V-242414	The Kubernetes cluster must use non-privileged host ports for user pods.	The vmware-system and tkg-system namespace are *special* namespaces with static ports required for system functioning.	Firewall or Network Policies may be used to limit traffic for these services.
V-242415	Secrets in Kubernetes must not be stored as environment variables.	AVI (TKG default load balancer) by default manages its secret for its CA in an environment variable.	There are not workarounds for this at the moment.
V-242418	The Kubernetes API server must use approved cipher suites.		This can be resolved by setting APISERVER_EXTRA_ARGS.
V-242425	Kubernetes Kubelet must enable tls-cert-file for client authentication to secure service.		RotateServerCertificates requires serving certificates to be manually approved. The user can manually enable this, approve the certificates, and then apply this setting to the kubelets.
V-242434	Kubernetes Kubelet must enable kernel protection.		This can be resolved by setting the worker node and control plane KUBELET_EXTRA_ARGS.

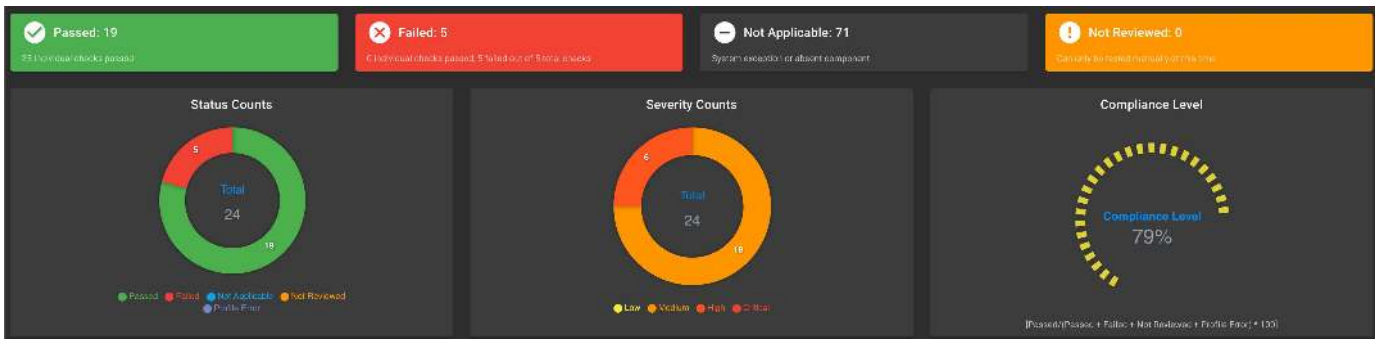
STIG ID	STIG Description	Reason	Workaround
V-242445	The Kubernetes component etcd must be owned by etcd.		To provision clusters, Tanzu Kubernetes Grid uses Cluster API which, in turn, uses the kubeadm tool to provision Kubernetes. kubeadm makes etcd run containerized as a static pod, therefore the directory does not need to be set to a particular user.
V-242468	The Kubernetes API Server must prohibit communication using TLS version 1.0 and 1.1, and SSL 2.0 and 3.0.		This can be resolved by setting APISERVER_EXTRA_ARGS
V-254800	Kubernetes must have a Pod Security Admission control file configured.		OPA Gatekeeper is a viable alternative and allows for finer grained pod security.

Hardening Plan-Based (Legacy) Workload Clusters

STIG scan results for plan-based (legacy) TKG workload clusters hardened as described in Hardening Plan-Based Workload Clusters are:

- Control Plane

- Worker Nodes



STIG Results and Exceptions for Plan-Based Cluster Control Plane

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242376	The Kubernetes Controller Manager must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.	No	Yes	This can be resolved with a `ytt` overlay

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242377	The Kubernetes Scheduler must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.	No	Yes	This can be resolved with a `ytt` overlay
V-242378	The Kubernetes API server must use TLS 1.2, at a minimum, to protect the confidentiality of sensitive data during electronic dissemination.	No	Yes	This can be resolved with a `ytt` overlay
V-242379	The Kubernetes etcd must use TLS to protect the confidentiality of sensitive data during electronic dissemination.	No	Yes	This can be resolved with a `ytt` overlay
V-242380	The Kubernetes etcd must use TLS to protect the confidentiality of sensitive data during electronic dissemination.	Yes		
V-242381	The Kubernetes Controller Manager must create unique service accounts for each work payload.	Yes		
V-242382	The Kubernetes API server must enable Node,RBAC as the authorization mode.	Yes		
V-242383	User-managed resources must be created in dedicated namespaces.	Yes		
V-242384	The Kubernetes Scheduler must have secure binding.	Yes		
V-242385	The Kubernetes Controller Manager must have secure binding.	Yes		
V-242386	The Kubernetes API server must have the insecure port flag disabled.	No	No	**Exception** `--insecure-port` flag has been removed in Kubernetes v1.24+
V-242387	The Kubernetes Kubelet must have the read-only port flag disabled.	Yes		
V-242388	The Kubernetes API server must have the insecure bind address not set.	Yes		
V-242389	The Kubernetes API server must have the secure port set.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242390	The Kubernetes API server must have anonymous authentication disabled.	No	No	**Exception** `RBAC` authorization is enabled on the API server (V-242382), it is generally considered reasonable to allow anonymous access to the API server for health checks and discovery purposes when `RBAC` is enabled
V-242391	The Kubernetes Kubelet must have anonymous authentication disabled.	Yes		
V-242392	The Kubernetes kubelet must enable explicit authorization.	Yes		
V-242393	Kubernetes Worker Nodes must not have sshd service running.	Yes		
V-242394	Kubernetes Worker Nodes must not have the sshd service enabled.	No	No	**Exception** `ssh` is restricted to only the bastion server and is needed to enable serving certificates and install monitoring tools. Also this is not a worker node
V-242395	Kubernetes dashboard must not be enabled.	Yes		
V-242396	Kubernetes Kubectl cp command must give expected access and results.	Yes		
V-242397	The Kubernetes kubelet static PodPath must not enable static pods.	No	No	**Exception** TKG utilizes the `staticPodPath` to launch numerous components so it can not be disabled
V-242398	Kubernetes DynamicAuditing must not be enabled.	Yes		
V-242399	Kubernetes DynamicKubeletConfig must not be enabled.	Yes		
V-242400	The Kubernetes API server must have Alpha APIs disabled.	Yes		
V-242401	The Kubernetes API server must have an audit policy set.	Yes		
V-242402	The Kubernetes API server must have an audit log path set.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		
V-242403	Kubernetes API server must generate audit records that identify what type of event has occurred, identify the source of the event, contain the event results, identify any users, and identify any containers associated with the event.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242404	Kubernetes Kubelet must deny hostname override.	No	No	**Exception** This is needed for public cloud Kubernetes clusters.
V-242405	The Kubernetes manifests must be owned by root.	Yes		
V-242406	The Kubernetes kubelet configuration file must be owned by root.	Yes		
V-242407	The Kubernetes kubelet configuration file must be owned by root.	Yes		
V-242408	The Kubernetes manifests must have least privileges.	Yes		
V-242409	Kubernetes Controller Manager must disable profiling.	No	Yes	This can be resolved with a `ytt` overlay
V-242410	The Kubernetes API server must enforce ports, protocols, and services(PPS) that adhere to the Ports, Protocols, and Services Management CategoryAssurance List (PPSM CAL).	No	No	**Exception** Manual Review - Handled by PPSM monitoring solution
V-242411	The Kubernetes Scheduler must enforce ports, protocols, and services(PPS) that adhere to the Ports, Protocols, and Services Management CategoryAssurance List (PPSM CAL).	No	No	**Exception** Manual Review - Handled by PPSM monitoring solution
V-242412	The Kubernetes Controllers must enforce ports, protocols, and services(PPS) that adhere to the Ports, Protocols, and Services Management CategoryAssurance List (PPSM CAL).	No	No	**Exception** Manual Review - Handled by PPSM monitoring solution
V-242413	The Kubernetes etcd must enforce ports, protocols, and services (PPS)that adhere to the Ports, Protocols, and Services Management Category AssuranceList (PPSM CAL).	No	No	**Exception** Manual Review - Handled by PPSM monitoring solution
V-242414	The Kubernetes cluster must use non-privileged host ports for user pods.	No	No	**Exception** Manual Review - Handled by PPSM monitoring solution
V-242415	Secrets in Kubernetes must not be stored as environment variables.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242416	Kubernetes Kubelet must not disable timeouts.	No	Yes	This can be resolved with a `ytt` overlay
V-242417	Kubernetes must separate user functionality.	No	No	**Exception** Manual Review
V-242418	The Kubernetes API server must use approved cipher suites.	Yes		
V-242419	Kubernetes API server must have the SSL Certificate Authority set.	Yes		
V-242420	Kubernetes Kubelet must have the SSL Certificate Authority set.	Yes		
V-242421	Kubernetes Controller Manager must have the SSL Certificate Authority set.	Yes		
V-242422	Kubernetes API server must have a certificate for communication.	Yes		
V-242423	Kubernetes etcd must enable client authentication to secure service.	Yes		
V-242424	Kubernetes Kubelet must enable `tls-private-key-file` for client authentication to secure service.	No	Yes	This can be enabled manually after the feature gate for the controller manager and kubelet, `RotateServerCertificates`, is added to the overlay along with the `client-ca-file` defined in the `kubelet` and the `kubelet-certificate-authority` defined in the api-server. Once the cluster starts with the aforementioned enabled the certificates can be manually approved as kubelet-serving certificates are not auto approved and then the kubelet configs can be modified to include `tls-private-key-file` and `tls-cert-file` both pointing at the newly create `kubelet-server-current.pem file`. Then simply restart the kubelet

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242425	Kubernetes Kubelet must enable `tls-cert-file` for client authentication to secure service.	No	Yes	This can be enabled manually after the feature gate for the controller manager and kubelet, `RotateServerCertificates`, is added to the overlay along with the `client-ca-file` defined in the `kubelet` and the `kubelet-certificate-authority` defined in the api-server. Once the cluster starts with the aforementioned enabled the certificates can be manually approved as kubelet-serving certificates are not auto approved and then the kubelet configs can be modified to include `tls-private-key-file` and `tls-cert-file` both pointing at the newly create `kubelet-server-current.pem file`. Then simply restart the kubelet
V-242426	Kubernetes etcd must enable client authentication to secure service.	Yes		
V-242427	Kubernetes etcd must have a key file for secure communication.	Yes		
V-242428	Kubernetes etcd must have a certificate for communication.	Yes		
V-242429	Kubernetes etcd must have the SSL Certificate Authority set.	Yes		
V-242430	Kubernetes etcd must have a certificate for communication.	Yes		
V-242431	Kubernetes etcd must have a key file for secure communication.	Yes		
V-242432	Kubernetes etcd must have peer-cert-file set for secure communication.	Yes		
V-242433	Kubernetes etcd must have a peer-key-file set for secure communication.	Yes		
V-242434	Kubernetes Kubelet must enable kernel protection.	No	Yes	This can be resolved after creating either a custom AMI or setting up the host's properly ahead of time and then enabling it via a `ytt` overlay

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242435	Kubernetes must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures or the installation of patches and updates.	Yes		
V-242435	Kubernetes must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures or the installation of patches and updates.	Yes		
V-242435	Kubernetes must prevent non-privileged users from executing privileged functions to include disabling, circumventing, or altering implemented security safeguards/countermeasures or the installation of patches and updates.	Yes		
V-242436	The Kubernetes API server must have the ValidatingAdmissionWebhook enabled.	Yes		
V-242437	Kubernetes must have a pod security policy set.	No	No	**Exception** OPA Gatekeeper is the recommended solution for Pod Security after the deprecation of Pod Security Policies
V-242438	Kubernetes API server must configure timeouts to limit attack surface.	Yes		
V-242439	Kubernetes API server must disable basic authentication to protect information in transit.	Yes		
V-242440	Kubernetes API server must disable token authentication to protect information in transit.	Yes		
V-242441	Kubernetes endpoints must use approved organizational certificate and key pair to protect information in transit.	Yes		
V-242442	Kubernetes must remove old components after updated versions have been installed.	No	No	**Exception** Manual Review

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242443	Kubernetes must contain the latest updates as authorized by IAVMs,CTOs, DTMs, and STIGs.	Yes		
V-242444	The Kubernetes component manifests must be owned by root.	Yes		
V-242445	The Kubernetes component etcd must be owned by etcd.	No	No	**Exception** The data directory (`/var/lib/etcd`) is owned by root:root.To provision clusters, Tanzu Kubernetes Grid uses Cluster API which, in turn, uses the kubeadm tool to provision Kubernetes. kubeadm makes etcd run containerized as a static pod, therefore the directory does not need to be set to a particular user. kubeadm configures the directory to not be readable by non-root users.
V-242446	The Kubernetes conf files must be owned by root.	Yes		
V-242447	The Kubernetes Kube Proxy must have file permissions set to 644 or more restrictive.	No	No	**Exception** Kubeconfig for `kube-proxy` is a symlink. The base file is 0644 or less permissive. Manual Review
V-242448	The Kubernetes Kube Proxy must be owned by root.	Yes		
V-242449	The Kubernetes Kubelet certificate authority file must have file permissions set to 644 or more restrictive.	Yes		
V-242450	The Kubernetes Kubelet certificate authority must be owned by root.	Yes		
V-242451	The Kubernetes component PKI must be owned by root.	Yes		
V-242452	The Kubernetes kubelet config must have file permissions set to 644 or more restrictive.	Yes		
V-242453	The Kubernetes kubelet config must be owned by root.	Yes		
V-242454	The Kubernetes kubeadm must be owned by root.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242455	The Kubernetes kubelet service must have file permissions set to 644 or more restrictive.	Yes		
V-242456	The Kubernetes kubelet config must have file permissions set to 644 or more restrictive.	Yes		
V-242457	The Kubernetes kubelet config must be owned by root.	Yes		
V-242458	The Kubernetes API server must have file permissions set to 644 or more restrictive.	Yes		
V-242459	The Kubernetes etcd must have file permissions set to 644 or more restrictive.	Yes		
V-242460	The Kubernetes admin.conf must have file permissions set to 644 or more restrictive.	Yes		
V-242461	Kubernetes API server audit logs must be enabled.	Yes		
V-242462	The Kubernetes API server must be set to audit log max size.	Yes		
V-242463	The Kubernetes API server must be set to audit log maximum backup.	Yes		
V-242464	The Kubernetes API server audit log retention must be set.	Yes		
V-242465	The Kubernetes API server audit log path must be set.	Yes		
V-242466	The Kubernetes PKI CRT must have file permissions set to 644 or more restrictive.	Yes		
V-242467	The Kubernetes PKI keys must have file permissions set to 600 or more restrictive.	Yes		
V-242468	The Kubernetes API server must prohibit communication using TLS version 1.0 and 1.1, and SSL 2.0 and 3.0.	No	Yes	This can be resolved with a `ytt` overlay

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242387	The Kubernetes Kubelet must have the read-only port flag disabled.	Yes		
V-242391	The Kubernetes Kubelet must have anonymous authentication disabled.	Yes		
V-242392	The Kubernetes kubelet must enable explicit authorization.	Yes		
V-242393	Kubernetes Worker Nodes must not have sshd service running.	Yes		
V-242394	Kubernetes Worker Nodes must not have the sshd service enabled.	No	No	**Exception** `ssh` is restricted to only the bastion server and is needed to enable serving certificates and install monitoring tools
V-242396	Kubernetes Kubectl cp command must give expected access and results.	Yes		
V-242397	The Kubernetes kubelet static PodPath must not enable static pods.	No	No	**Exception** `staticPodPath` is needed for TKG to install properly as several of the pods in the tkg-system are defined there
V-242398	Kubernetes DynamicAuditing must not be enabled.	Yes		
V-242399	Kubernetes DynamicKubeletConfig must not be enabled.	Yes		
V-242400	The Kubernetes API server must have Alpha APIs disabled.	Yes		
V-242404	Kubernetes Kubelet must deny hostname override.	No	No	**Exception** `hostname-override` is needed for public cloud deployments of Kubernetes
V-242406	The Kubernetes kubelet configuration file must be owned by root.	Yes		
V-242407	The Kubernetes kubelet configuration file must be owned by root.	Yes		
V-242416	Kubernetes Kubelet must not disable timeouts.	No	Yes	This can be resolved with a `ytt` overlay
V-242420	Kubernetes Kubelet must have the SSL Certificate Authority set.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242425	Kubernetes Kubelet must enable tls-cert-file for client authentication to secure service.	No	Yes	This can be enabled manually after the feature gate for the controller manager and kubelet, `RotateServerCertificates`, is added to the overlay along with the `client-ca-file` defined in the `kubelet` and the `kubelet-certificate-authority` defined in the api-server. Once the cluster starts with the aforementioned enabled the certificates can be manually approved as kubelet-serving certificates are not auto approved and then the kubelet configs can be modified to include `tls-private-key-file` and `tls-cert-file` both pointing at the newly create `kubelet-server-current.pem file`. Then simply restart the kubelet
V-242434	Kubernetes Kubelet must enable kernel protection.	No	Yes	This can be resolved after creating either a custom AMI or setting up the host's properly ahead of time and then enabling it via a ytt overlay
V-242449	The Kubernetes Kubelet certificate authority file must have file permissions set to 644 or more restrictive.	Yes		
V-242450	The Kubernetes Kubelet certificate authority must be owned by root.	Yes		
V-242451	The Kubernetes component PKI must be owned by root.	Yes		
V-242452	The Kubernetes kubelet config must have file permissions set to 644 or more restrictive.	Yes		
V-242453	The Kubernetes kubelet config must be owned by root.	Yes		
V-242454	The Kubernetes kubeadm must be owned by root.	Yes		
V-242455	The Kubernetes kubelet service must have file permissions set to 644 or more restrictive.	Yes		

VID	Finding Title	Compliant by default?	Can be Resolved?	Explanation/Exception
V-242456	The Kubernetes kubelet config must have file permissions set to 644 or more restrictive.	Yes		
V-242457	The Kubernetes kubelet config must be owned by root.	Yes		
V-242466	The Kubernetes PKI CRT must have file permissions set to 644 or more restrictive.	Yes		

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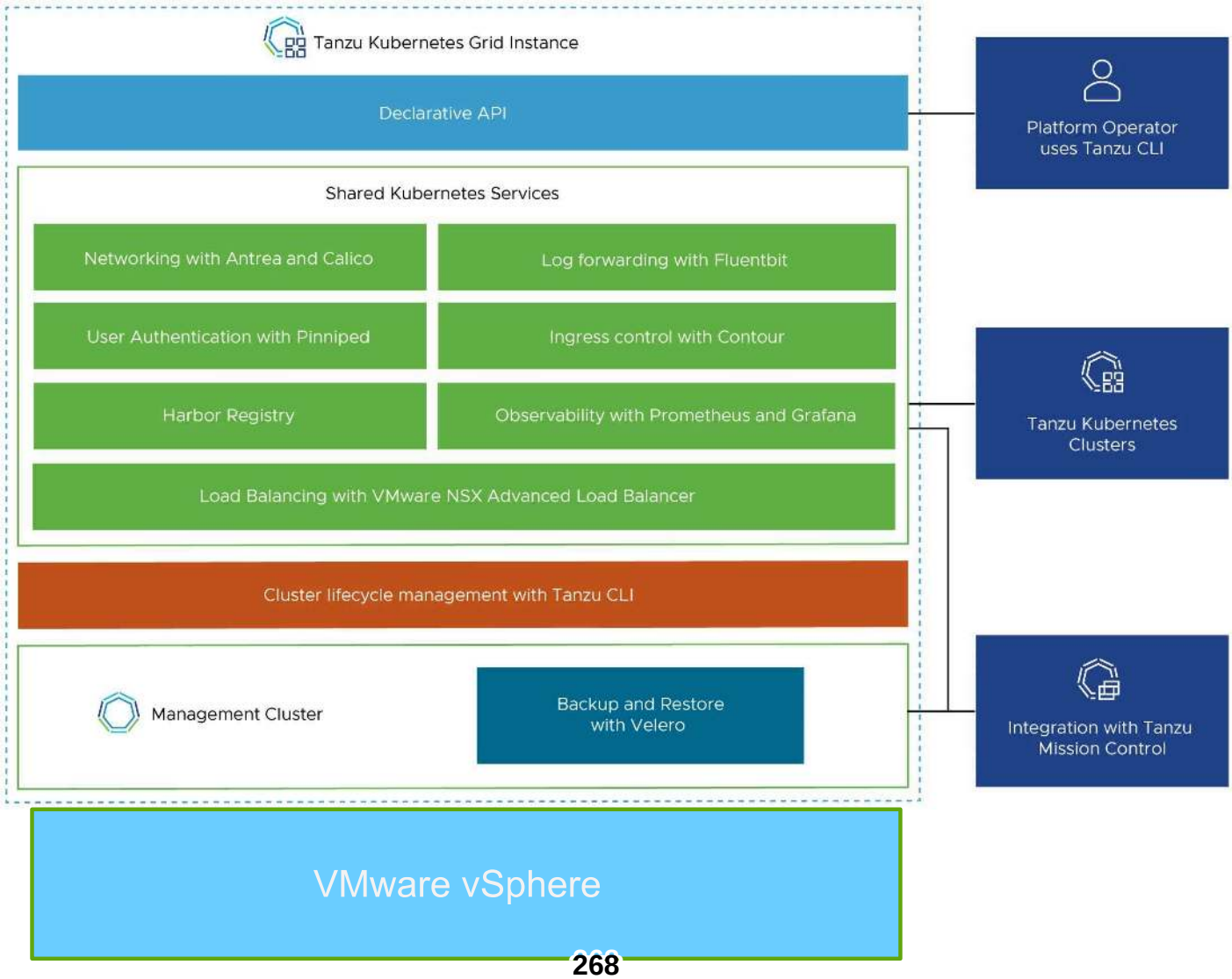
VMware Tanzu Kubernetes Grid v2.5.x

Last Updated August 13, 2025

VMware Tanzu Kubernetes Grid provides a consistent, upstream-compatible Kubernetes substrate that is ready for end-user workloads and ecosystem integrations. Tanzu Kubernetes Grid (TKG) provides the Kubernetes runtime for vSphere.



For information about what Tanzu Kubernetes Grid is and its capabilities, see About Tanzu Kubernetes Grid.

Docs for Tanzu Kubernetes Grid with a standalone management cluster

Tanzu Kubernetes Grid uses a management cluster to create and manage workload clusters. You can either deploy a standalone management cluster, or use the vSphere Supervisor as a management cluster. A standalone management cluster is a special-purpose Kubernetes cluster that you deploy on an infrastructure and use to create workload clusters on that same infrastructure. A standalone management cluster allows you to deploy Kubernetes clusters on vSphere 7 and vSphere 8 when using the vSphere Supervisor is not an option.

Important: The publications listed below describe how to use **TKG with a standalone management cluster**. This documentation does not describe how to use the vSphere Supervisor.

- For descriptions of when to use a standalone management cluster and when to use a vSphere Supervisor, see Management Clusters: vSphere Supervisors and Standalone in *About Tanzu Kubernetes Grid*
- For information about how to use the vSphere Supervisor, see the VMware vSphere Supervisor documentation

About Tanzu Kubernetes Grid	**Deploying and Managing Standalone Management Clusters on vSphere**
Learn about the capabilities of the latest version of Tanzu Kubernetes Grid, including descriptions of the differences between vSphere Supervisors and standalone management clusters, types of workload clusters, descriptions of Tanzu Kubernetes releases and custom node images, explanations about how identity and access management works in TKG, how to extend the capabilities of your clusters by installing packages on them and information about Security and Compliance.	Describes how to set up your environment for management cluster deployment, install the Tanzu CLI and use it to deploy standalone management clusters in connected environments and in environments that are not connected to the Internet. Other topics include how to register your management cluster with Tanzu Mission Control, build custom machine images, and configure identity and access management and networking.

Creating and Managing TKG Workload Clusters on vSphere with the Tanzu CLI	**Installing and Using Tanzu Standard Packages**
Create workload clusters on vSphere by using the Tanzu CLI. Manage your clusters after deployment, including how to connect to, manage, scale, restart, and delete your clusters, as well as how to manage cluster secrets, configure machine health checks, and back up and restore clusters.	Tanzu Standard Packages add extra functionality to clusters. The extra functionality that you can add to clusters includes Certificate management, Monitoring, Ingress control, Log forwarding, DNS service discovery, Support for multiple network interfaces, and Harbor container registry.

For information about new features, compatibility, component versions, and resolved and known issues, see the Tanzu Kubernetes Grid v2.5.x Release Notes.

See also the Tanzu CLI Documentation to learn about the architecture, commands, and options of the Tanzu CLI.

The Tanzu Kubernetes Grid documentation in HTML reflects the latest minor release of each Tanzu Kubernetes Grid version. For example, version 2.5 contains updates for all 2.5.x patch releases. In addition to HTML, all our documentation also comes in PDF format, which you can access by selecting the Download PDF icon on any HTML page in a publication.

TKG solutions workbooks and reference architectures

The Tanzu Reference Architecture Documentation contains validated reference architecture and designs for deploying TKG in varied deployment scenarios. The Reference Architecture docs include Tanzu Solutions Workbooks that describe how to implement specific use cases with Tanzu and TKG and Tanzu Kubernetes Grid 2.x Air-Gapped Reference Design and Deployment that describes how to create management and workload clusters in a specific and validated configuration in air-gapped environments.

TKG compliance and hardening

TKG releases are continuously validated against the Defense the Information Systems Agency Security Technical Implementation Guides (DISA STIG), Cybersecurity and Infrastructure Security Agency (CISA) and the National Security Agency (NSA) framework, and the National Institute of Standards and Technology (NIST) guidelines. Information about STIG and NSA/CISA compliance is available for all supported TKG versions:

Tanzu Kubernetes Grid 2.5 Compliance and Hardening | v2.4

TKG support

Tanzu Kubernetes Grid operates the N-2 Lifecycle Policy, wherein the latest minor release and the two minor releases that immediately precede it are supported, with a minimum support duration of 12 months. To allow you time to upgrade, documentation for the most recent unsupported version of TKG remains online until support for the next oldest version ends. PDF documentation for older unsupported releases of Tanzu Kubernetes Grid is available upon request from VMware Support. For information about the dates on which support ends for given TKG versions, see the Broadcom Product Lifecycle Matrix.

Content feedback and comments

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AI Buyer Insights: ze USA, an Oracle Retail Merchandising customer evaluated SAP Retail Management

Broadcom (inc. VmWare) Named Top-Tier Software Vendor by APPS RUN THE WORLD in the APPS TOP 500 Market Report

Apps Top 500 Report - Excel Edition [Preview]

Broadcom (inc. VmWare) Strengths, Domain Expertise, and Key Differentiators

Broadcom boasts a robust product portfolio catering to critical markets such as data center, networking, enterprise software, and more. With deep domain expertise and a focus on automation, monitoring, and security, Broadcom's solutions empower businesses to navigate complex technological landscapes with confidence. Leveraging AI and ML features, Broadcom's ValueOps, DevOps, and AIOps solutions deliver unparalleled operational intelligence, optimizing workflow efficiency and ensuring superior performance.

Broadcom (inc. VmWare) Recent Developments

In November 2023, Broadcom finalized its acquisition of VMware for $69 billion. This integration significantly boosted infrastructure software revenue, which nearly tripled to $21.5 billion in fiscal year 2024, compared to $7.6 billion the previous year. However, changes in licensing and pricing policies have raised concerns among some customers and partners.

Broadcom (inc. VmWare) Mergers and Acquisitions (M&A)

Activities

Broadcom has made significant strategic moves to reshape its business focus. It sold its End-User Computing division, including Horizon and Workspace ONE, to private equity firm KKR as part of its plan to concentrate on core operations. Meanwhile, it has been exploring the potential acquisition of Intel business units related to chip design and marketing, though these discussions remain in early stages and would involve regulatory review. Broadcom also completed a major acquisition of VMware, expanding its software capabilities in virtualization and cloud infrastructure. As part of this integration, VMware was reorganized into four divisions, and Broadcom moved its headquarters to VMware's campus in Palo Alto.

Broadcom (inc. VmWare) Customers in ARTW Customer Database

Leveraging a rigorous data-centric research methodology, APPS RUN THE WORLD asks the simple question: **Who's buying Broadcom (inc. VmWare) applications and why?** And we provide the answers – supported by decades of research – to our clients around the world. Our Customer database has over 100 data fields that detail company usage of Broadcom (inc. VmWare) and other enterprise apps by function, customer size, industry, location, implementation status, partner involvement, Line of Business Key Stakeholders and IT decision makers contact details. List of Verified Broadcom Mainframe Software, Enterprise Software, customers.

Broadcom (inc. VmWare) Overview

1320 Ridder Park Drive
San Jose, CA, 95131, United States
1 408-433-8000
https://www.broadcom.com/

Ownership: - NASDAQ: AVGO
Number of Employees: 37000
Functional Markets: ITSM, PPM,
Key Verticals: Aerospace and Defense, Automotive, Banking and Financial Services, Communication, Construction and Real Estate, CPG, Distribution, Education, Government, Healthcare, Insurance, Leisure and Hospitality, Life Sciences, Manufacturing, Media, Non Profit, Oil Gas Chemicals, Professional Services, Retail, Transportation, Utility,

Broadcom (inc. VmWare) Key Enterprise and Cloud Applications

Broadcom Mainframe Software, Enterprise Software,

Broadcom (inc. VmWare) Revenues, $M:

Type/Year	2023	2024	YoY Growth, %
Total Revenues, $M	Subscribe	Subscribe	Subscribe
Enterprise Applications Revenues, $M	Subscribe	Subscribe	Subscribe
Cloud Applications Revenues, $M	Subscribe	Subscribe	Subscribe

* Enterprise Applications Revenues = License + Support & Maintenance + SaaS

** All revenue figures are estimates based on public records, Cloud and Non-Cloud business models in Apps Run The World's vendor database, and annual survey results including vendor feedback.

Broadcom (inc. VmWare) Revenue Breakdown By Type, $M:

Type	License	Services	Hardware	S&M	SaaS	PaaS	IaaS	Other
% of Total Revenues	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe
Revenues, $M	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe	Subscribe

Broadcom (inc. VmWare) Enterprise Applications Revenues By

Functional Markets, $M:

Split by Functional Markets	% of Total Revenues	2024 Enterprise Apps Revenues, By Functional Markets, $M
Analytics and BI	Subscribe	Subscribe
Collaboration	Subscribe	Subscribe
Content Management	Subscribe	Subscribe
Customer Relationship Management	Subscribe	Subscribe
eCommerce	Subscribe	Subscribe
Enterprise Performance Management	Subscribe	Subscribe
ERP Financial Management	Subscribe	Subscribe
ERP Services and Operations Management	Subscribe	Subscribe
Human Capital Management	Subscribe	Subscribe
IT Service Management	Subscribe	Subscribe
PLM/Engineering	Subscribe	Subscribe
Project Portfolio Management	Subscribe	Subscribe
Procurement	Subscribe	Subscribe
Sales Performance Management	Subscribe	Subscribe
Supply Chain Management	Subscribe	Subscribe
Treasury and Risk Management	Subscribe	Subscribe
Total	Subscribe	Subscribe

Broadcom (inc. VmWare) Enterprise Applications Revenues By

Verticals, $M:

Split by Verticals	% of Total Revenues	2024 Enterprise Apps Revenues, By Verticals, $M
Aerospace and Defense	Subscribe	Subscribe
Automotive	Subscribe	Subscribe
Banking and Financial Services	Subscribe	Subscribe
Communication	Subscribe	Subscribe
Construction and Real Estate	Subscribe	Subscribe
Consumer Packaged Goods	Subscribe	Subscribe
Distribution	Subscribe	Subscribe
Education	Subscribe	Subscribe
Government	Subscribe	Subscribe
Healthcare	Subscribe	Subscribe
Insurance	Subscribe	Subscribe
Leisure and Hospitality	Subscribe	Subscribe
Life Sciences	Subscribe	Subscribe
Manufacturing	Subscribe	Subscribe
Media	Subscribe	Subscribe
Non Profit	Subscribe	Subscribe
Oil, Gas and Chemicals	Subscribe	Subscribe
Professional Services	Subscribe	Subscribe
Retail	Subscribe	Subscribe
Transportation	Subscribe	Subscribe
Utilities	Subscribe	Subscribe

Split by Verticals	% of Total Revenues	2024 Enterprise Apps Revenues, By Verticals, $M
Total	Subscribe	Subscribe

Broadcom (inc. VmWare) Revenues By Region, $M

Region	% of Total Revenues	2024 Total Revenues, $M	2024 Enterprise Applications Revenues, $M	2024 Cloud Applications Revenues, $M
Americas	Subscribe	Subscribe	Subscribe	Subscribe
EMEA	Subscribe	Subscribe	Subscribe	Subscribe
APAC	Subscribe	Subscribe	Subscribe	Subscribe
Total	Subscribe	Subscribe	Subscribe	Subscribe

Broadcom (inc. VmWare) Direct vs Indirect sales

Type	Direct Sales	Indirect Sales	Total
Type %	Subscribe	Subscribe	Subscribe
Revenues, $M	Subscribe	Subscribe	Subscribe

Broadcom (inc. VmWare) Customers - Breakdown by Geo, Size, Vertical and Product

List of Verified Broadcom (inc. VmWare) Customers

No. of Broadcom (inc. VmWare) Customers: x
No. of Broadcom (inc. VmWare) Enterprise Applications Customers: x
No. of Broadcom (inc. VmWare) Cloud Customers: x
No. of Broadcom (inc. VmWare) Cloud Subscribers: x

Broadcom Inc. is a global technology company headquartered in Palo Alto, California, which, as of 2024, employs approximately 37,000 people and serves a broad customer base across various

industries and regions. Its customer structure includes around 600 strategic clients, who generate roughly 70% of the company's annual recurring revenue and represent large enterprises operating in hybrid cloud environments. In addition to these, Broadcom also serves approximately 100,000 smaller commercial clients, contributing an additional 6% of its revenue. Geographically, the majority of Broadcom's revenue is derived from the Asia-Pacific region, which accounts for more than two-thirds of the total, while the remainder comes from the Americas, Europe, the Middle East, and Africa. The company maintains strong relationships with some of the biggest names in the industry, including Apple, Cisco, Dell, and other global players.

Broadcom (inc. VmWare) Market Opportunities, M&A and Geo Expansions

The IT industry presents immense opportunities for growth, especially with the proliferation of cloud, IoT, AI, and ML technologies. Broadcom is well-positioned to capitalize on these trends by expanding into new regions and verticals, offering innovative solutions tailored to emerging market demands. Embracing these transformative technologies, Broadcom can unlock new revenue streams and solidify its position as a leader in the digital era.

Broadcom (inc. VmWare) Risks and Challenges

Despite its strong market position, Broadcom faces inherent risks, including customer concentration and dependency on key OEMs and distributors. Quarterly fluctuations in operating results and sensitivity to adverse developments in significant customer accounts pose challenges to sustained growth. Moreover, navigating competitive landscapes and go-to-market complexities requires strategic agility and proactive risk management strategies.

Broadcom (inc. VmWare) Ecosystem, Partners, Resellers and SI

Broadcom's ecosystem is characterized by strategic technology integrations and partnerships, enhancing its market presence and driving innovation. Collaborations with system integrators and value-added resellers amplify Broadcom's reach, fostering network effects and accelerating go-to-market initiatives. By fostering symbiotic relationships within its ecosystem, Broadcom strengthens its competitive advantage and delivers value-added solutions to customers worldwide.

Research Methodology

Data used in research reports are derived from publicly available documents, continuous surveys of applications vendors, customers, resellers, Independent Software Vendors, systems integrators and other verifiable sources.

Vendor shares and market forecast results are based on a combination of existing databases as well as demand side and supply side research conducted throughout the year with validation from

vendors, customers, channel partners and documentations such as earnings releases and 10Q and 10K filings, vertical industry studies, regional and country-level statistics from public and private institutions(i.e. colleges, universities, government agencies and trade associations).

For additional information on our methodologies, here's the link:
https://www.appsruntheworld.com/About Us
https://www.appsruntheworld.com/taxonomy
https://www.appsruntheworld.com/FAQ

Technographics Database

- Apps Purchases
- Apps Customers
- Apps Directory
- Apps Categories
- Apps Resellers and SIs
- Apps Technographics
- ARTW Chrome Extension

Surging Buyer Activity (30d)

Uber

Assa Abloy

DKSH Holding

IGBMC

J.P. Morgan

Iron Mountain Do Brasil

University of Washington

Morgan Stanley

Oscilar

Humber College

Ford Motor Company

NTT Data

Boost Mobile

Conexon

Kyndryl

Monthly Customer Wins

2023 July Scan

2023 August Scan

2023 September Scan

2023 October Scan

2023 November Scan

2023 December Scan

2024 January Scan

2024 February Scan

2024 March Scan

2024 April Scan

2024 May Scan

2024 June Scan

2024 July Scan

2024 August Scan

2024 September Scan

2024 October Scan

2024 November Scan

2024 December Scan

2025 January Scan

2025 February Scan

2025 March Scan

2025 April Scan

2025 May Scan

2025 June Scan

2025 July Scan

2025 August Scan

2025 September Scan

2025 October Scan

2025 November Scan

2025 December Scan

Cloud Market

- Top 10 Cloud Players
- Top 10 Cloud CRM
- Top 10 Cloud ERP
- Top 10 Cloud EPM
- Top 10 Cloud HCM
- Top 10 Cloud Procurement

Functional Market

- Top 10 Analytics and BI
- Top 10 Collaboration
- Top 10 Content Management
- Top 10 CRM
- Top 10 eCommerce
- Top 10 EPM
- Top 10 ERP
- Top 10 HCM
- Top 10 ITSM
- Top 10 PLM and Engineering
- Top 10 PPM
- Top 10 Procurement
- Top 10 SPM
- Top 10 SCM
- Top 10 TRM

Vertical Market

Top 10 Aerospace and Defense

Top 10 Automotive

Top 10 Banking and FS

Top 10 CPG

Top 10 Communications

Top 10 CRE

Top 10 Construction

Top 10 Real Estate

Top 10 Distribution

Top 10 Education

Top 10 K12

Top 10 Higher Education

Top 10 Government

Top 10 Federal Government

Top 10 State and Local

Top 10 Public Safety

Top 10 Healthcare

Top 10 Insurance

Top 10 Life Insurance

Top 10 P&C Insurance

Top 10 Specialty Insurance

Top 10 Leisure and Hospitality

Top 10 Leisure and Recreation

Top 10 Hospitality

Top 10 Life Sciences

Top 10 Manufacturing

Top 10 Media

Top 10 Non Profit

Top 10 Faith-Based

Top 10 Special Cause

Top 10 Youth and Elderly Care

Top 10 Oil, Gas and Chemicals

Top 10 Professional Services

Top 10 Retail

Top 10 Transportation

Top 10 Utilities

HR Segments

HCM Top 500

HCM Market Overview

Top 10 Core HR and TM

Top 10 Benefit Administration

Top 10 Compensation

Top 10 Compliance

Top 10 Core HR

Top 10 Payroll

Top 10 L&D

Top 10 Pension Administration

Top 10 Performance

Top 10 Succession Planning

Top 10 Talent Acquisition

Top 10 Applicant Tracking

Top 10 Contingent Labor

Top 10 Candidate Relationship

Top 10 Onboarding

Top 10 Recruiting

Top 10 Sourcing

Top 10 Workforce Management

Top 10 Absence Management

Top 10 Fatigue Management

Top 10 Task Management

Top 10 Time and Attendance

Top 10 Workforce Analytics

Top 10 Workforce Scheduling

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Leveraging a rigorous data-centric research methodology, APPS RUN THE WORLD asks the simple question: *Who's buying enterprise applications from whom and why?*

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Apps Database

- Apps Purchases
- Apps Customers
- Apps Directory
- Apps Categories
- Apps Resellers and SIs
- Apps Technographics
- ARTW Chrome Extension

Research Services

- ABM and Demand Generation
- Competitive Intelligence
- Go-To-Market Strategy
- IT Expertise & Product Management
- Survey and Research Studies
- Channel and Ecosystem
- Investor Services

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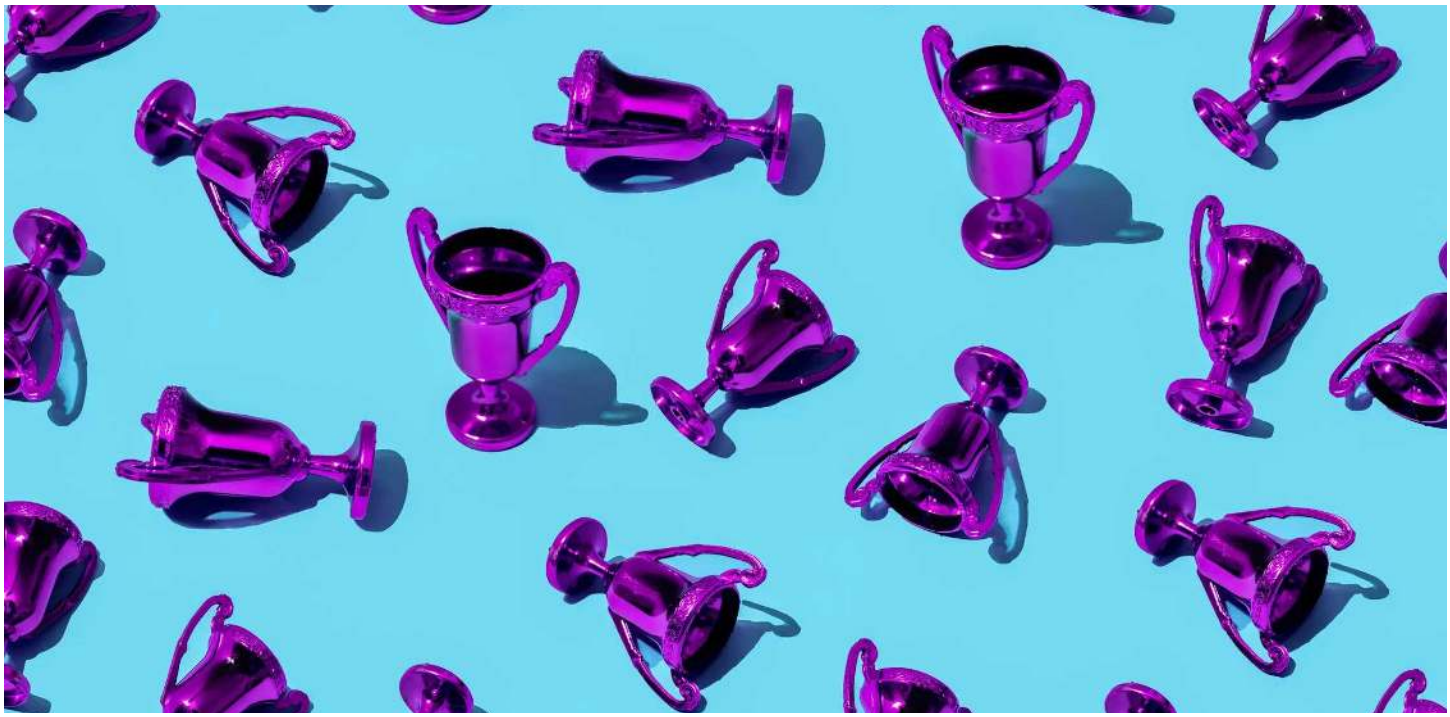
PARTNERS • 1 min read

Broadcom 2025 VMware Cloud Service Provider Partner Awards: Accelerating Customer Time to Value

Ricky Cooper • March 11, 2026



We are delighted to announce our Broadcom VMware Cloud Service Provider (VCSP) Partner Awards, recognizing key partners for their outstanding 2025 accomplishments and contributions helping customers rapidly achieve their business objectives by unlocking the value of VMware Cloud Foundation. Our winning partners spanning the globe played key roles in driving growth, innovation, go-to-market execution excellence, investing in enablement and technical expertise, all while delivering superior customer outcomes.

Congratulations to our winners!

2025 VCSP Partner Winners

2025 VCSP Partner of the Year

- Americas: 11:11 Systems
- EMEA: evoila
- APAC: Zettagrid Pty Ltd

2025 VCSP Sovereign Cloud Partner of the Year

- Americas: ThinkOn
- EMEA: Vivicta
- APAC: Interactive PTY LTD

2025 VMware Cloud Foundation as a Service Partner of the Year

- Americas: Rapidscale, a Cox Business Company
- EMEA: OEDIV
- APAC: Viettel IDC

2025 VMware Cloud Commerce Partner of the Year

- Americas: Insight Enterprises, Inc.
- EMEA: TD SYNNEX
- APAC: Crayon Australia PTY Ltd

2025 VCSP Innovation Partner of the Year

- Americas: OTAVA
- EMEA: ANS Group
- APAC: NTT SmartConnect

About the Author

Ricky Cooper

VP CSP & OEM Sales at Broadcom

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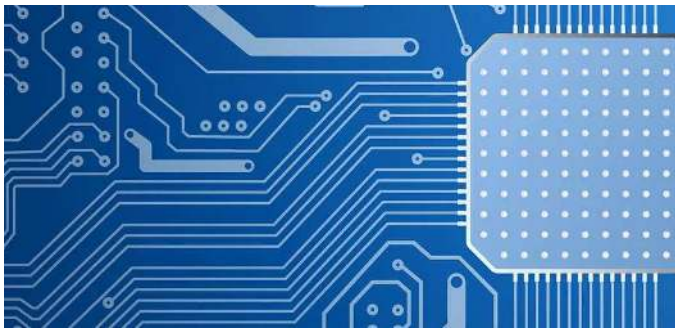

News

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PROFILE UPGRADE PROFILE

Broadcom

AVGO

San Jose, California

$372.61

Share Price

as of April 13 12:04:40 PM EST

▲ +1.05 (+0.28%)

Forbes does not accept payment for placement on lists.

From the Editor

Last Updated Feb 10, 2026, 6:00pm EDT

Broadcom, Inc. is a global technology company, which designs, develops and supplies semiconductor and infrastructure software solutions. It operates through the following segments: Semiconductor Solutions, Infrastructure Software and IP licensing. The Semiconductor Solutions segment manages movement of data in data center, telecom, enterprise and embedded networking applications. The Infrastructure Software segment provides a portfolio of mainframe, enterprise and storage area networking solutions. The IP licensing segment licenses a portion of its broad IP portfolio. The company was founded in 1961 and is headquartered in San Jose, CA. Read Less

Broadcom Stats

Industry	Semiconductors, Electronics, Electrical Engineering
Founded	1991

Headquarters	San Jose, California
Country/Territory	United States
Chief Executive Officer	Hock E. Tan
Employees	17,760

Forbes Lists

#548	America's Best Large Employers (2026) Semiconductors, Electronics, Electrical Engineering
#72	America's Best Companies (2026) Semiconductors, Electronics, Electrical Engineering

Contact

www.linkedin.com/in/audramontenegro (LinkedIn)

Top Skills

Thought Leadership
global community
Video Production

Languages

Spanish
Sign Languages

Certifications

Inclusive Speaker Orientation
Speaker - KCD Colombia 2023
Inclusive Open Source Community Orientation
Speaker: KubeCon + CloudNativeCon Europe 2025

Honors-Awards

Toastmasters International Competent Communicator
Speaker at KCD Colombia

Audra Montenegro

Community Builder | Production Manager
United States

Summary

A highly motivated production and content professional with experience in global events, such as large tech conferences and small summits. I am an experienced speaker and program committee liaison, and project manager, and have a demonstrated history of working in the e-learning, tech industry.

A creative problem solver who brings an innovative approach to difficult business situations, including tight deadlines. I cultivate and maintain strong relationships with organizers, vendors, and speaking talent inside and outside of any of my employers.

My passion is not only connecting and spotlighting industry leaders, innovators and technical practitioners, but also orchestrating between teams and elevating new voices.

Experience

Cloud Native Computing Foundation (CNCF)

Community Outreach Manager
June 2022 - Present (3 years 9 months)

Manage the production and process for the following since...
2025
* CNCF Ambassador Program
* Member Online Programs
2024
* The ChatLoopBackOff (CLBO) LIVE demos of CNCF projects by CNCF ambassadors
* Videography on-site at KubeCon + CloudNativeCon Europe and North American events
2022
* Kubernetes Community Days (KCDs) global summit-like events
* Cloud Native Community Groups (CNCGs) and their global meetups

Monte Communications
Co-founder and CEO
November 2021 - Present (4 years 4 months)
Sonoma County, California, United States

Open||Source||Data Podcast
Executive Producer
June 2020 - December 2023 (3 years 7 months)
United States

Tune-in to open source veteran, Sam Ramji as he hosts conversations with innovators who are shaping the future of open source data, open source software, data on Kubernetes, data in DevOps, data in AI, and more.

With 32 episodes released thus far, three seasons, and a bi-weekly cadence, the Open||Source||Data podcast has grown an organic following of almost 10,000 listeners. Have a look at the link below to see what friends we have made. Guests range from technical practitioners, startup founders and CEOs, Data Scientists, Data Analysts, experts in AI and ML, and other open source and data veterans.

Cassandra Summit
Speaker Promotions
May 2023 - November 2023 (7 months)
San Jose, California, United States

Liaison for speakers between The Linux Foundation, Constantia (for Planet Cassandra), and DataStax (for Apache Cassandra Corner podcast) to help promote each speaker's session as desired.

DataStax
Event Leader
April 2020 - November 2021 (1 year 8 months)
Santa Clara, California, United States

Virtual event production and creative experiences. Producer of the Open|| Source||Data podcast with host, Sam Ramji. Highlighted a variety of voices from community to thought leadership. Managed speaker placement in third party event opportunities or sponsorships. Producer of The Data Innovation Hour program with customers, partners, and analysts, covering industry topics.

O'Reilly Media
7 years 3 months

Senior Conference Speaker Manager
February 2015 - April 2020 (5 years 3 months)
California, United States

From keynote coordination and rehearsals, to liaising with program chairs and committee members, to content quality control with speakers and emcees - I not only managed the logistics of content but worked on a team of 4 with 1 direct report.

I also helped manages vendor relationships, worked closely with Sales on partner speaking opportunities and nurturing sponsors, coordinated speaker self-promotion, encouraged a diverse lineup, coordinated of ancillary events, and helped enforce a code of conduct.

I also managed a budget, and had fun with speaker swag ideas.

See below position for more...

Conference Speaker Manager
February 2014 - February 2015 (1 year 1 month)

Project manager for up to 8 program committees per year. Developed and produced online conference agendas. Negotiated and managed speaking contracts, as a liaison between speakers and internal teams. Wrote, managed, and distributed logistical correspondence to conference speakers for a minimum of 6 in-person conferences a year with anywhere from 75-300 speakers per event. Oversaw and managed all aspects of speaker logistics, from content submission to audiovisual requirements to travel, fees, lodging, and honorarium. Managed plenary production for each conference.

PR/Marketing Associate
June 2013 - January 2014 (8 months)
Sebastopol, CA

Coordinated, performed, and hosted webcasts. Active in social media (Facebook, Google Plus, Twitter, Tumblr, LinkedIn): posting/finding content, and performing analysis. Communication and organization in programs such as Wordpress, iPost, and FileMaker. Coordinated book reviews, all while maintaining author relationships. Marketed a variety of events: webcasts, camps, and conferences all while providing community outreach.

Marketing Specialist
February 2013 - June 2013 (5 months)
Sebastopol, CA

Design: Processed book covers, worked in Photoshop, assisted with the creation of marketing materials, in addition to the use of Excel, Adobe, Google Docs and Word on a daily basis.
I also worked through the entire process of creating, ordering, and sending author frames while nurturing author relationships.

Marketing: Used Filemaker, Excel, and Google Docs in daily research practices. Coordinated with organizers of book clubs, user groups and meetups on a weekly basis. Provided editorial services like proofing newsletters, and reviewing and testing website for a good UX.

Cyrus
Restaurant Professional
May 2007 - December 2013 (6 years 8 months)
Healdsburg, California, United States

FRONT OF THE HOUSE, FINE DINING, AND PRIVATE EVENTS
(with a pause in-between working at other restaurants like Stark Reality Restaurants, and A16 from 2008-2010)

This 2 out 3 Michelin-star restaurant, showcased a friendly, white-glove and black suit service experience. I served my time under Maître d'Hôtel/Owner, Nick Peyton. At the time, Nick had about 20 years of experience managing many of San Francisco's top restaurants. My role was hybrid, so I also served under pioneer and award-winning chef, Douglas Keane.

Education

Sonoma State University
Bachelor of Business Administration (BBA), Business Administration-Marketing · (2010 - 2011)

San Francisco State University
Business Administration · (2008 - 2010)

Santa Rosa Junior College
AA, Social & Behavioral Sciences · (2005 - 2008)

Linux Foundation
2810 N Church St PMB 57274
Wilmington, DE 19802-444
Phone/Fax: +1 415 723 9709
https://www.linuxfoundation.org

2026, January 21

To Whom It May Concern,

I am pleased to submit this letter in support of Amim Moises Salum Knabben. I serve as Community Outreach Manager at the Cloud Native Computing Foundation (CNCF), and in this role, I run the CNCF Ambassador program and the standards and responsibilities associated with it. I am writing based on my professional knowledge of Mr. Knabben's documented activities and contributions as a CNCF Ambassador.

CNCF, part of the Linux Foundation, hosts the world's most critical cloud native open source projects, including Kubernetes, Prometheus, Envoy, Helm, and Istio. With over 850 corporate members and adoption across virtually all Fortune 500 companies, CNCF technologies are used by more than 5.6 million Kubernetes developers worldwide. Its flagship KubeCon + CloudNativeCon events draw 10,000–12,000 attendees in Europe and the Americas and over 1,000 in Asia.

Since 2023, Mr. Knabben has served as a CNCF Ambassador, supporting cloud native communities through events, mentoring, and collaboration, and acting as a key resource for individuals and organizations engaging with CNCF projects. The role requires rigorous selection, including proven technical contributions (minimum DevStats score of 20) and active leadership through SIG/TAG participation, Kubernetes Community Days, or CNCF event program committees.

Mr. Knabben was selected among the first four Ambassadors in Brazil, reflecting his sustained contributions, such as:

- Organized cloud native meetups and regional events in Florianópolis; founded Cloud Native Santa Catarina in southern Brazil
- Launched and led Kubernetes Community Days Floripa, establishing a sustained local CNCF and Kubernetes community through in-person and virtual events
- Served on KubeCon + CloudNativeCon program committees (2023–2024); promoted to Track Chair at KubeCon + CloudNativeCon North America 2023
- Contributed to program committees for Istio Day and other colocated events
- Presented for three consecutive years at GopherCon LATAM and spoke at Linux Foundation events, including gRPC Conf 2023
- Earned the Golden Kubestronaut title by completing all required certifications I

strongly support this application and will provide additional information if necessary.

Sincerely,

Audra Montenegro
Community Outreach Manager
Cloud Native Computing Foundation
linkedin.com/in/audramontenegro/

CNCF and SlashData Report Finds Cloud Native Community Reaches Nearly 20 Million Developers

NEWS PROVIDED BY
Cloud Native Computing Foundation →
Mar 24, 2026, 04:00 ET

New research highlights the rapid growth of cloud native development and evolving platform engineering and AI adoption trends

Key Highlights:

- CNCF and SlashData release the Q1 2026 State of Cloud Native Development report, analyzing trends across more than 12,500 global developers.
- The global cloud native developer community has grown to 19.9 million developers.
- Platform engineering and internal developer platforms are reshaping how developers interact with infrastructure, abstracting technologies like Kubernetes and containers.
- 7.3 million AI developers are now cloud native, highlighting the growing role of cloud native infrastructure in operationalizing AI.

AMSTERDAM, March 24, 2026 /PRNewswire/ -- **KUBECON + CLOUDNATIVECON EUROPE - The Cloud Native Computing Foundation®** (CNCF®), which builds sustainable ecosystems for cloud native software, today released new insights from its latest **State of Cloud Native Development report** in collaboration with **SlashData**. Based on data from more than 12,500 developers across 100 countries, the research focuses on the continued expansion of the cloud native ecosystem and the growing role of platform engineering and artificial intelligence (AI) workloads in shaping the future of software development.

The latest report estimates that the global cloud native developer population has reached 19.9 million developers, representing roughly 39% of all developers worldwide. This reflects how cloud native technologies have expanded beyond traditional backend infrastructure teams and are now diversely used across workload types, from traditional to AI.

"Cloud native has reached an important inflection point. Cloud native technologies were once quietly the infrastructure layer for the future of software and now it's fully noticeable," said Jonathan Bryce, executive director, CNCF. "What's exciting is seeing the ecosystem continue to evolve for a wider range of use cases and push the community to build new tools and practices."

Cloud Native Adoption Continues to Expand

The report found that the cloud native ecosystem continues to scale as technologies like Kubernetes, service meshes, and containers become standard tools for building and operating modern application architectures.

- The cloud native developer community expanded from 15.6 million developers in Q3 2025 to 19.9 million in Q1 2026, a 28% increase in just six months.
- Among backend developers, 52% are now classified as cloud native, an increase from 49% recorded in Q1 2025.
- Adoption is expanding across multiple developer segments, including gaming and industrial IoT, highlighting how cloud native technologies are spreading beyond infrastructure-centric roles.

Platform Engineering Is Changing How Developers Use Cloud Native Technologies

The report emphasizes that the rise of platform engineering is reshaping how developers interact with infrastructure technologies.

While tools like Kubernetes remain foundational, developers are increasingly accessing it indirectly through internal developer platforms (IDPs) and standardized infrastructure environments managed by platform teams.

- 88% of backend developers now work with at least one form of infrastructure standardization, up from 80% from the previous six months.
- The proportion of developers working without formalized DevOps or platform practices declined from 20% to 12%.
- The growth of developer experience teams and unified DevOps systems suggests infrastructure is becoming increasingly abstracted from application developers.

This shift reflects a broader industry trend toward platform engineering models that allow developers to focus on application logic while platform teams manage underlying infrastructure.

AI Developers Show Divergent Maturity Pathways

The report also shows how AI developers are adopting cloud native technologies in ways that differ from traditional backend developers.

The report estimates 7.3 million AI developers are now cloud native, underscoring the growing importance of cloud native infrastructure for scaling model training, data pipelines and inference.

- Technologies such as observability tools, feature flagging and event-driven architectures play a critical role in supporting AI pipelines.
- Advanced production workloads are more frequently combining service meshes, chaos engineering and multicluster deployments to support resilient model serving.

"The findings illustrate how cloud native technologies are supporting diverse developer needs, whether it's traditional application platforms or new AI workloads," said Liam Bollmann-Dodd, principal market research consultant at SlashData. "Understanding how developers adopt these technologies helps pinpoint which tools and practices should be at the forefront to support modern software development."

To learn more, download the full **State of Cloud Native Development report**.

About Cloud Native Computing Foundation

Cloud native computing empowers organizations to build and run scalable applications with an open source software stack in public, private, and hybrid clouds. The Cloud Native Computing Foundation (CNCF) hosts critical components of the global technology infrastructure, including Kubernetes, Prometheus, and Envoy. CNCF brings together the industry's top developers, end users, and vendors and runs the largest open source developer conferences in the world. Supported by nearly 800 members, including the world's largest cloud computing and software companies, as well as over 200 innovative startups, CNCF is part of the nonprofit Linux Foundation. For more information, please visit **www.cncf.io**.

About SlashData

SlashData is an analyst firm with more than 20 years of experience in the software industry, working with the top Tech brands. SlashData helps platform and engineering leaders make better product, marketing and strategy decisions through best-in-class research, benchmarks, and foresight into how developers, tools, and software are changing.

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Media Contact
Haley White
The Linux Foundation
pr@cncf.io

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Exhibit J. Evidence that the person has commanded a high salary or other significantly high remuneration for services in relation to others in the field

Ministry of Finance

Federal Revenue Service of Brazil

Individual Income Tax

Tax Year: 2025

Certificate of Income Paid and Income Tax Withheld at Source

Calendar Year: 2024

Please check the conditions and deadline for filing the Individual Income Tax Return for this calendar year on the website of the Federal Revenue Service of Brazil, at <rfb.gov.br>.

1. Paying Source – Legal Entity or Individual

CNPJ/CPF	Business Name / Full Name:	
19.758.880/0001-98	VMWARE SOFTWAREE SERVICOS BRASIL LTDA	
Address: R SURUBIM FLOOR: 3 AND 4; ROOM: 32 ,41 AND 42		
City: SÃO PAULO	State: SP	Telephone: (011) 32182622

2. Individual Beneficiary of the Income

CPF	Full Name	
057.799.179-57	AMIM MOISES SALUM KNABBEN	
Location: 100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	Cost Center: 607116 - 607116	
Nature of Income: Income from Salaried Employment		

3. Taxable Income, Deductions, and Income Tax Withheld at Source

	Values in Reais
1. Total income (including vacation pay)	562.846,76
2. Official social security contribution	7.270,80
3. Contributions to public or private complementary pension plans and to an Individual Programmed Retirement Fund (FAPI) **(also complete Section 7)**	0,00
4. Alimony **(also complete Section 7)**	0,00
5. Income Tax Withheld at Source (IRRF)	144.146,96

4. Exempt and Non-Taxable Income

	Values in Reais
1. Exempt portion of retirement, reserve pay, reform, and pension benefits (65 years or older), excluding the exempt portion of the 13th-month salary (thirteenth month salary).	0,00
2. Exempt portion of the 13th salary related to retirement, reserve pay, reform, and pension benefits (65 years or older)	0,00
3. Daily allowances and cost reimbursements	0,00
4. Pensions and retirement or reform benefits due to serious illness; retirement or reform benefits due to work-related accident	0,00
5. Profits and dividends, calculated as of 1996, paid by a legal entity (actual, presumed, or arbitrated profit)	0,00
6. Amounts paid to the owner or partner of a microenterprise or small business, excluding wage compensation, rent, or services rendered	0,00
7. Indemnities for termination of employment contract, including voluntary severance programs (PDV), and for work-related accidents	0,00
8. Late payment interest received due to the delayed payment of remuneration for employment, position, or function	0,00
9. Others **(specify)**	
PECUNIARY BENEFIT - VACATION	17.413,40

5. Income Subject to Exclusive Taxation (Net Income)

	Values in Reais
1. 13th salary (annual bonus)	41.863,84
2. Income Tax Withheld at Source on the 13th salary	14.643,53
3. Others	

6. Accumulated Income Received – Article 12-A of Law No. 7,713 of 1988 (Subject to exclusive taxation)

6.1 Case number:	**Number of months**	0,0
Nature of income:		

	Values in Reais
1. Total taxable income (including vacation pay and 13th salary)	0,00
2. Exclusion: Court-related expenses	0,00
3. Deduction: Official social security contribution	0,00
4. Deduction: Alimony **(also complete Section 7)**	0,00
5. Income Tax Withheld at Source (IRRF)	0,00
6. Exempt income from pension, retirement or reform benefits due to serious illness, or retirement or reform benefits due to work-related accident	0,00

Ministry of Finance

Federal Revenue Service of Brazil

Individual Income Tax

Tax Year: 2025

Certificate of Income Paid and Income Tax Withheld at Source

Calendar Year: 2024

Please check the conditions and deadline for filing the Individual Income Tax Return for this calendar year on the website of the Federal Revenue Service of Brazil, at <rfb.gov.br>.

1. Paying Source – Legal Entity or Individual

CNPJ/CPF	Business Name / Full Name:
19.758.880/0001-98	VMWARE SOFTWAREE SERVICOS BRASIL LTDA

Address: R SURUBIM FLOOR: 3 AND 4; ROOM: 32 ,41 AND 42

City	State	Telephone
SÃO PAULO	SP	(011) 32182622

2. Individual Beneficiary of the Income

CPF	Full Name
057.799.179-57	AMIM MOISES SALUM KNABBEN

Location	Cost Center
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	607116 - 607116

Nature of Income: Income from Salaried Employment

7. Additional Information

OTHER INFORMATION:

MEDICAL ASSISTANCE 367,64

HEALTH CARE INFORMATION:

CNPJ : 44.673.382/0001-90 - OMINT SERVIÇOS DE SAÚDE LTDA **ANS REGISTRATION** 359661

Beneficiary **Amount paid during the year**

HOLDER 367,64

8. Person Responsible for the Information

Name	Date	Signature
FABIO MISSOLA	02/28/2025	

Approved by RFB Normative Instruction No. 2,060, of December 13, 2021. V: 2025.4.0.6 SEQ : 00001

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana **Date: January 27, 2026**

Ministério da Fazenda
Secretaria da Receita Federal do Brasil
Imposto sobre a Renda da Pessoa Física
Exercício de 2025

Comprovante de Rendimentos Pagos e de Imposto sobre a Renda Retido na Fonte

Ano - calendário de 2024

Verifique as condições e o prazo para a apresentação da Declaração do Imposto sobre a Renda da Pessoa Física para este ano-calendário no sítio da Secretaria da Receita Federal do Brasil na Internet, no endereço <rfb.gov.br>.

1. Fonte Pagadora Pessoa Jurídica ou Pessoa Física

CNPJ/CPF	Nome Empresarial/Nome Completo		
19.758.880/0001-98	VMWARE SOFTWARE E SERVICOS BRASIL LTDA		
Endereço			
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42			
Cidade		UF	Telefone
SÃO PAULO		SP	(011)32182622

2. Pessoa Física Beneficiária dos Rendimentos

CPF	Nome Completo
057.799.179-57	AMIM MOISES SALUM KNABBEN
Lotação	Centro de Custo
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	607116 - 607116
Natureza do Rendimento	
Rendimento do Trabalho Assalariado	

3. Rendimentos Tributáveis, Deduções e Imposto sobre a Renda Retido na Fonte

	Valores em reais
1. Total dos rendimentos (inclusive férias)	562.846,76
2. Contribuição previdenciária oficial	7.270,80
3. Contribuição a entidades de previdência complementar, pública ou privada, e a Fundo de Aposentadoria Programada Individual (Fapi) **(preencher também o quadro 7)**	0,00
4. Pensão alimentícia **(preencher também o quadro 7)**	0,00
5. Imposto sobre a Renda Retido na Fonte (IRRF)	144.146,96

4. Rendimentos Isentos e Não Tributáveis

	Valores em reais
1. Parcela isenta dos proventos de aposentadoria, reserva remunerada, reforma e pensão (65 anos ou mais), exceto a parcela isenta do 13º (décimo terceiro) salário	0,00
2. Parcela isenta do 13º salário de aposentadoria, reserva remunerada, reforma e pensão (65 anos ou mais)	0,00
3. Diárias e ajudas de custo	0,00
4. Pensão e proventos de aposentadoria ou reforma por moléstia grave; proventos de aposentadoria ou reforma por acidente em serviço	0,00
5. Lucros e dividendos, apurados a partir de 1996, pagos por pessoa jurídica (lucro real, presumido ou arbitrado)	0,00
6. Valores pagos ao titular ou sócio da microempresa ou empresa de pequeno porte, exceto pró-labore, aluguéis ou serviços prestados	0,00
7. Indenizações por rescisão de contrato de trabalho, inclusive a título de PDV, e por acidente de trabalho	0,00
8. Juros de mora recebidos, devidos pelo atraso no pagamento de remuneração por exercício de emprego, cargo ou função	0,00
9. Outros **(especificar)**	
ABONO PECUNIARIO - FERIAS	17.413,40

5. Rendimentos sujeitos à Tributação Exclusiva (rendimento líquido)

	Valores em reais
1. 13º (décimo terceiro) salário	41.863,84
2. Imposto sobre a Renda Retido na Fonte sobre 13º (décimo terceiro) salário	14.643,53
3. Outros	

6. Rendimentos Recebidos Acumuladamente - Art. 12-A da Lei nº7.713, de 1988 (sujeito à tributação exclusiva)

6.1 Número do processo:	**Quantidade de meses**	0,0
Natureza do rendimento:		

	Valores em reais
1. Total dos rendimentos tributáveis (inclusive férias e décimo terceiro salário)	0,00
2. Exclusão: Despesas com a ação judicial	0,00
3. Dedução: Contribuição previdenciária oficial	0,00
4. Dedução: Pensão alimentícia **(preencher também o quadro 7)**	0,00
5. Imposto sobre a Renda Retido na Fonte (IRRF)	0,00
6. Rendimentos isentos de pensão, proventos de aposentadoria ou reforma por moléstia grave ou aposentadoria ou reforma por acidente em serviço	0,00

Ministério da Fazenda
Secretaria da Receita Federal do Brasil
Imposto sobre a Renda da Pessoa Física
Exercício de 2025

Comprovante de Rendimentos Pagos e de Imposto sobre a Renda Retido na Fonte

Ano - calendário de 2024

Verifique as condições e o prazo para a apresentação da Declaração do Imposto sobre a Renda da Pessoa Física para este ano-calendário no sítio da Secretaria da Receita Federal do Brasil na Internet, no endereço <rfb.gov.br>.

1. Fonte Pagadora Pessoa Jurídica ou Pessoa Física

CNPJ/CPF	Nome Empresarial/Nome Completo		
19.758.880/0001-98	VMWARE SOFTWARE E SERVICOS BRASIL LTDA		
Endereço			
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42			
Cidade		UF	Telefone
SÃO PAULO		SP	(011)32182622

2. Pessoa Física Beneficiária dos Rendimentos

CPF	Nome Completo	
057.799.179-57	AMIM MOISES SALUM KNABBEN	
Lotação		Centro de Custo
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA		607116 - 607116
Natureza do Rendimento		
Rendimento do Trabalho Assalariado		

7. Informações Complementares

OUTRAS INFORMAÇÕES

ASSISTENCIA MEDICA 367,64

INFORMAÇÕES DE ASSISTÊNCIA SAÚDE

CNPJ : 44.673.382/0001-90 - OMINT SERVIÇOS DE SAÚDE LTDA **REG. ANS** 359661

Beneficiários	Valor pago no ano
TITULAR	367,64

8. Responsável pelas Informações

Nome	Data	Assinatura
FABIO MISSOLA	28/02/2025	

Aprovado pela Instrução Normativa RFB nº 2060, de 13 de dezembro de 2021. V: 2025.4.0.6 SEQ : 00001

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	10/01/2025 to 10/30/2025	1	10/30/2025	10/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
02200	RSU		619.850,12		
02445	REMOTE WORK REIMBURSEMENT		271,66		
02446	ADJUSTMENT - REMOTE WORK REIMBURSEMENT		2.988,26		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			9.525,57	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
08555	DEDUCTION - RSU CORPORATE SHARES			619.850,12	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				658.934,23
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	658.934,23	Total Deductions:	644.701,39	Net Pay:	**14.232,84**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
658.934,23	658.934,23	52.714,74	37.942,90

*CTPS – Employment Record Book
*IRRF – Withholding Income Tax
*FGTS – Length-of-Service Guarantee Fund
*INSS – National Social Security Institute

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	09/01/2025 to 09/30/2025	1	09/30/2025	09/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
02100	BONUS		47,389.00		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			21,661.06	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				83,213.19
20000	NUMBER OF MONTHLY SALARY DAYS				30,00
25305	TOTAL QUANTITY - BONUS PAYMENT WITHOUT INCREASE				47,389.00

Total Earnings:	83,213.19	Total Deductions:	36,986.76	Net Pay:	**46,226.43**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
83,213.19	83,213.19	6,657.06	82,071.98

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	08/01/2025 to 08/31/2025	1	08/29/2025	08/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	14	16.717,96		
04000	VACATION PAY 1 OCCURRENCE		19.106,24		
04005	VACATION PAY (1/3) 1 OCCURRENCE		6.368,75		
04010	VACATION PAY AVERAGE 1 OCCURRENCE		14.592,92		
04015	VACATION PAY AVERAGE - 1/3 1 OCCURRENCE		4.864,31		
07202	INSS REFUND - MONTHLY		697,85		
07230	INSS WITHHELD - VACATION I			1.649,47	
07400	IRRF - MONTHLY			3.521,73	
07510	IRRF WITHHELD - VACATION I			10.237,25	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09900	VACATION ADVANCE DEDUCTION - MONTH I			33.045,50	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				61.650,18
20000	NUMBER OF MONTHLY SALARY DAYS				14,00

Total Earnings:	62.348,03	Total Deductions:	48.498,35	Net Pay:	**13.849,68**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
61.650,18	61.650,18	4.932,01	16.110,76

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	07/01/2025 to 07/31/2025	1	07/30/2025	07/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	26	31.047,63		
02200	RSU – CORPORATE SHARES		276.783,20		
04000	VACATION PAY 1 OCCURRENCE		4.776,56		
04005	VACATION PAY (1/3) 1 OCCURRENCE		1.592,19		
04010	VACATION AVERAGE 1 OCCURRENCE		3.648,23		
04015	VACATION AVERAGE 1/3 1 OCCURRENCE		1.216,08		
04020	PECUNIARY BENEFIT 1 OCCURRENCE		11.941,39		
04025	PECUNIARY BENEFIT 1/3 1 OCCURRENCE		3.980,46		
04030	AVERAGE PECUNIARY BENEFIT 1 OCCURRENCE		9.120,57		
04035	AVERAGE PECUNIARY BENEFIT - 1/3 1 OCCURRENCE		3.040,19		
04105	RECALCULATION PECUNIARY BENEFIT ADJUSTMENT 1 OCCURRENCE		0,01		
07200	INSS – MONTHLY			697,85	
07230	INSS WITHHELD – VACATION I			253,77	
07400	0IRRF – MONTHLY			7.385,32	
07510	IRRF WITHHELD – VACATION I			2.763,07	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
08555	DEDUCTION – RSU CORPORATE SHARES			276.783,20	
09800	BIWEEKLY ADVANCE DEDUCTION			12.419,05	
09900	VACATION ADVANCE DEDUCTION – MONTH I			36.298,83	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				319.063,89
20000	NUMBER OF MONTHLY SALARY DAYS				26,00

Total Earnings:	347.146,51	Total Deductions:	336.645,49	Net Pay:	**10.501,02**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
319.063,89	319.063,89	25.525,11	30.160,19

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	06/01/2025 to 06/30/2025	1	06/30/2025	06/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
02100	BONUS		47.389,00		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			21.661,06	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				83.213,19
20000	NUMBER OF MONTHLY SALARY DAYS				30,00
25305	TOTAL QUANTITY - BONUS PAYMENT WITHOUT INCREASE				47.389,00

Total Earnings:	83.213,19	Total Deductions:	36.986,76	Net Pay:	**46.226,43**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
83.213,19	83.213,19	6.657,06	82.071,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	05/01/2025 to 05/31/2025	1	05/30/2025	05/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			8.629,09	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08105	MEDICAL ASSISTANCE CO-PAYMENT 1			73,49	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				35.824,19
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	35.824,19	Total Deductions:	24.028,28	Net Pay:	**11.795,91**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
35.824,19	35.824,19	2.865,94	34.682,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	04/01/2025 to 04/30/2025	1	04/30/2025	04/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
02200	RSU - CORPORATE SHARES		336.796,14		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			8.641,82	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
08555	DEDUCTION - RSU CORPORATE SHARES			336.796,14	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				372.620,33
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	372.620,33	Total Deductions:	360.763,66	Net Pay:	**11.856,67**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
372.620,33	372.620,33	29.809,63	34.682,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	03/01/2025 to 03/31/2025	1	03/28/2025	03/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			8.641,82	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				35.824,19
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	35.824,19	Total Deductions:	23.967,52	Net Pay:	**11.856,67**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
35.824,19	35.824,19	2.865,94	34.682,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	02/01/2025 to 02/28/2025	1	02/28/2025	02/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
02200	RSU - CORPORATE SHARES		434.284,83		
02250	LOCAL BONUS		6.200,00		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			10.346,82	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
08555	DEDUCTION - RSU CORPORATE SHARES			434.284,83	
09800	BIWEEKLY ADVANCE DEDUCTION			14.329,68	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				476.309,02
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	476.309,02	Total Deductions:	459.957,35	Net Pay:	**16.351,67**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
476.309,02	476.309,02	38.104,72	40.882,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	01/01/2025 to 01/31/2025	1	01/30/2025	01/2025

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	35.824,19

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	35.824,19		
07200	INSS - MONTHLY			951,62	
07400	IRRF - MONTHLY			8.641,82	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08105	MEDICAL ASSISTANCE CO-PAYMENT 1			107,58	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			13.677,27	
11000	CONTRACTUAL SALARY				35.824,19
11505	UNEMPLOYMENT INSURANCE BASE				35.824,19
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	35.824,19	Total Deductions:	23.422,69	Net Pay:	**12.401,50**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
35.824,19	35.824,19	2.865,94	34.682,98

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	12/01/2024 to 12/31/2024	1	12/30/2024	12/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	34.193,18

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	34.193,18		
02100	BONUS		127.315,58		
02280	ANNUAL PERFORMANCE BONUS		153.636,00		
04920	13TH SALARY (COMPLEMENTARY)	12	23.412,63		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			85.466,74	
07410	IRRF - 13TH SALARY			6.438,48	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08105	MEDICAL ASSISTANCE CO-PAYMENT 1			165,60	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			13.677,27	
11000	CONTRACTUAL SALARY				34.193,18
11505	UNEMPLOYMENT INSURANCE BASE				315.144,76
20000	NUMBER OF MONTHLY SALARY DAYS				30,00
25305	TOTAL GROSS EARNINGS - ADVANCES WITHOUT INCREASE				280.951,58
26130	TOTAL GROSS EARNINGS - ADVANCES WITHOUT INCREASE III				153.636,00

Total Earnings:	338.557,39	Total Deductions:	106.701,34	Net Pay:	**231.856,05**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
315.144,76	338.557,39	27.084,59	56.132,16

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	11/01/2024 to 11/30/2024	1	11/29/2024	11/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	SOFTWARE ENGINEER R&D	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	34.193,18

Code	Description	Qty	Earnings	Deductions	Result
00005	Salary	30	34.193,18		
07200	INSS - Monthly			908,85	
07400	IRRF - Monthly			8.205,05	
07815	Union Assistance Contribution			35,00	
08310	Meal Voucher			9,40	
09800	Biweekly Advance Deduction			13.278,90	
11000	Contractual Salary				34.193,18
11505	Unemployment Insurance Base				34.193,18
20000	Number of Monthly Salary Days				30,00

Total Earnings:	34.193,18	Total Deductions:	22.437,20	Net Pay:	**11.755,98**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
34.193,18	34.193,18	2.735,45	33.094,74

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	10/01/2024 to 10/31/2024	1	10/30/2024	10/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	Salary	30	33.197,26		
02200	RSU - Corporate Shares		308.291,87		
02445	Telework Reimbursement		271,66		
07200	INSS - Monthly			908,85	
07400	IRRF - Monthly			8.005,88	
07815	Union Assistance Contribution			35,00	
08105	Medical Assistance Co-payment 1			104,40	
08310	Meal Voucher			9,40	
08555	RSU - Corporate Shares Deduction			308.291,87	
09800	Biweekly Advance Deduction			13.278,90	
11000	Contractual Salary				33.197,26
11505	Unemployment Insurance Base				341.760,79
20000	Number of Monthly Salary Days				30,00

Total Earnings:	341.760,79	Total Deductions:	330.634,30	Net Pay:	**11.126,49**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
341.760,79	341.760,79	27.340,86	32.370,48

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	09/01/2024 to 09/30/2024	1	09/30/2024	09/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	Salary	30	33.197,26		
02445	Telework Reimbursement		271,66		
07200	INSS - Monthly			908,85	
07400	IRRF - Monthly			8.005,88	
07815	Union Assistance Contribution			35,00	
08310	Meal Voucher			9,40	
09800	Biweekly Advance Deduction			13.278,90	
11000	Contractual Salary				33.197,26
11505	Unemployment Insurance Base				33.468,92
20000	Number of Monthly Salary Days				30,00

Total Earnings:	33.468,92	Total Deductions:	22.238,03	Net Pay:	**11.230,89**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
33.468,92	33.468,92	2.677,51	32.370,48

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	08/01/2024 to 08/31/2024	1	08/30/2024	08/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	10	11.065,75		
02445	TELEWORK REIMBURSEMENT		271,66		
04000	VACATION PAY 1 OCCURRENCE		22.131,51		
04005	1/3 VACATION BONUS 1 OCCURRENCE		7.377,17		
04010	AVERAGE VACATION PAY 1 OCCURRENCE		3.988,60		
04015	AVERAGE 1/3 VACATION BONUS 1 OCCURRENCE		1.329,53		
04020	PECUNIARY BENEFIT 1 OCCURRENCE		11.065,75		
04025	1/3 PECUNIARY BENEFIT 1 OCCURRENCE		3.688,58		
04030	AVERAGE PECUNIARY BENEFIT 1 OCCURRENCE		1.994,30		
04035	AVERAGE 1/3 PECUNIARY BENEFIT 1 OCCURRENCE		664,77		
07230	INSS WITHHELD - VACATION I			908,85	
07400	IRRF - MONTHLY			2.066,47	
07510	IRRF WITHHELD - VACATION I			8.379,30	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08105	MEDICAL ASSISTANCE CO-PARTICIPATION 1			43,63	
08310	MEAL VOUCHER			9,40	
09900	VACATION ADVANCE DEDUCTION - MONTH I			42.952,06	
11000	CONTRACTUAL SALARY				33.197,26
11505	UNEMPLOYMENT INSURANCE BASE				46.164,22
20000	NUMBER OF MONTHLY SALARY DAYS				10,00

Total Earnings:	63.577,62	Total Deductions:	54.394,71	Net Pay:	**9.182,91**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
46.164,22	46.164,22	3.693,14	10.772,61

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	07/01/2024 to 07/31/2024	1	07/30/2024	07/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	33.197,26		
02200	RSU - CORPORATE SHARES		42.745,30		
02445	TELEWORK REIMBURSEMENT		271,66		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			8.005,88	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08105	MEDICAL ASSISTANCE CO-PARTICIPATION 1			54,01	
08310	MEAL VOUCHER			9,40	
08555	RSU - CORPORATE SHARES DEDUCTION			42.745,30	
09800	BIWEEKLY ADVANCE DEDUCTION			13.278,90	
11000	CONTRACTUAL SALARY				33.197,26
11505	UNEMPLOYMENT INSURANCE BASE				76.214,22
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	76.214,22	Total Deductions:	65.037,34	Net Pay:	**11.176,88**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
76.214,22	76.214,22	6.097,14	32.370,48

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	06/01/2024 to 06/30/2024	1	06/28/2024	06/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	33.197,26		
02445	TELEWORK REIMBURSEMENT		271,66		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			8.005,88	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			13.278,90	
11000	CONTRACTUAL SALARY				33.197,26
11505	UNEMPLOYMENT INSURANCE BASE				33.468,92
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	33.468,92	Total Deductions:	22.238,03	Net Pay:	**11.230,89**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
33.468,92	33.468,92	2.677,51	32.370,48

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY	05/01/2024 to 05/31/2024	1	05/31/2024	05/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	33.197,26		
02445	TELEWORK REIMBURSEMENT		271,66		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			8.005,88	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08310	MEAL VOUCHER			9,40	
09800	BIWEEKLY ADVANCE DEDUCTION			13.278,90	
11000	CONTRACTUAL SALARY				33.197,26
11505	UNEMPLOYMENT INSURANCE BASE				33.468,92
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	33.468,92	Total Deductions:	22.238,03	Net Pay:	**11.230,89**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
33.468,92	33.468,92	2.677,51	32.370,48

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		04/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY	30	33.197,26		
02200	RSU - CORPORATE SHARES		192.057,86		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			7.879,04	
07815	UNION ASSISTANCE CONTRIBUTION			35,00	
08555	RSU - CORPORATE SHARES DEDUCTION			192.057,86	
09800	BIWEEKLY ADVANCE DEDUCTION			13.278,90	
11000	CONTRACTUAL SALARY				33.197,26
11505	UNEMPLOYMENT INSURANCE BASE				225.255,12
20000	NUMBER OF MONTHLY SALARY DAYS				30,00

Total Earnings:	225.255,12	Total Deductions:	214.159,65	Net Pay:	**11.095,47**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
225.255,12	225.255,12	18.020,41	32.098,82

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		03/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	Salary		33.197,26		
07200	INSS - Monthly			908,85	
07400	IRRF - Monthly			7.879,04	
07815	Union Assistance Contribution			35,00	
09800	Biweekly Advance Deduction			13.278,90	
11000	Contractual Salary				33.197,26

Total Earnings:	33.197,26	Total Deductions:	22.101,79	Net Pay:	**11.095,47**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
7.786,02	0,00	0,00	31.909,23

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		02/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	1	1	33.197,26

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY		33.197,26		
00006	MONTHLY SALARY DIFFERENCE		1.276,82		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			8.230,16	
07815	UNION ASSISTANCE CONTRIBUTION			20,00	
09800	BIWEEKLY ADVANCE DEDUCTION			12.768,18	
11000	CONTRACTUAL SALARY				33.197,26

Total Earnings:	34.474,08	Total Deductions:	21.927,19	Net Pay:	**12.546,89**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
7.786,02	0,00	2.655,78	33.186,05

BROADCOM

PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		01/2024

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	2	0	31.920,44

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY		31.920,44		
02605	GYM REIMBURSEMENT		1.596,00		
07200	INSS - MONTHLY			908,85	
07400	IRRF - MONTHLY			7.977,85	
07815	UNION ASSISTANCE CONTRIBUTION			50,00	
09800	BIWEEKLY ADVANCE DEDUCTION			12.768,18	
11000	CONTRACTUAL SALARY				31.920,44

Total Earnings:	33.516,44	Total Deductions:	21.704,88	Net Pay:	**11.811,56**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
7.786,02	0,00	2.681,32	32.228,41

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		12/2023

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	2	0	31.920,44

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY		31.920,44		
02200	RSU - CORPORATE SHARES		125.824,80		
07200	INSS - MONTHLY			876,95	
07400	IRRF - MONTHLY			7.547,73	
08555	RSU - CORPORATE SHARES DEDUCTION			125.824,80	
09800	BIWEEKLY ADVANCE DEDUCTION			12.768,18	
11000	CONTRACTUAL SALARY				31.920,44

Total Earnings:	157.745,24	Total Deductions:	147.017,66	Net Pay:	**10.727,58**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
7.507,49	53.447,54	14.757,52	30.664,31

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PAYSLIP

Payroll:	Payment Period:	Page:	Payment Date:	Reference:
MONTHLY		1		11/2023

Company Name:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Name:	Identifier:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS* /Series /State	Position:	Salary Type:
62625170/0010/SC	Senior Technical Staff Member	MONTHLY

Work Location:	Admission Date:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	09/08/2021

Work Location Address:	City - State:
R. Surubim, Floors 3 and 4; Rooms 32, 41 and 42 No. 504 – Cidade Monções	SÃO PAULO-SP

Bank / Branch:	Account:	*IRRF No. of Dependents:	No. of Dependents (Family Allowance):	Contractual Salary:
33/0155	010436519	2	0	31.920,44

Code	Description	Qty	Earnings	Deductions	Result
00005	SALARY		31.920,44		
07200	INSS - MONTHLY			876,95	
07400	IRRF - MONTHLY			7.547,73	
09800	BIWEEKLY ADVANCE DEDUCTION			12.768,18	
11000	CONTRACTUAL SALARY				31.920,44

Total Earnings:	31.920,44	Total Deductions:	21.192,86	Net Pay:	**10.727,58**

*INSS Contribution Salary:	*FGTS Calculation Base:	Monthly FGTS:	IRPF Calculation Base:
7.507,49	0,00	2.553,64	30.664,31

I, Marina Viana Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that I have performed the professional translation of this document from Portuguese to English, as a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Marina Viana

Date: January 27, 2026

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RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/10/2025 a 31/10/2025	1	30/10/2025	10/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
02200	RSU ACOES CORPORATIVAS		619.850,12		
02445	REEMBOLSO TELE TRABALHO		271,66		
02446	DIF REEMBOLSO TELE TRABALHO		2.988,26		
07200	INSS MES			951,62	
07400	IRRF MES			9.525,57	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			619.850,12	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				658.934,23
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	658.934,23	Total de descontos:	644.701,39	Total líquido:	**14.232,84**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
658.934,23	658.934,23	52.714,74	37.942,90

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RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/09/2025 a 30/09/2025	1	30/09/2025	09/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
02100	BONUS		47.389,00		
07200	INSS MES			951,62	
07400	IRRF MES			21.661,06	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				83.213,19
20000	NUM DIAS SALARIO MENSALISTA				30,00
25305	QTD TOTAL PR GR AD SEM ACRESCIMO				47.389,00

Total de proventos:	83.213,19	Total de descontos:	36.986,76	Total líquido:	**46.226,43**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
83.213,19	83.213,19	6.657,06	82.071,98

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RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/08/2025 a 31/08/2025	1	29/08/2025	08/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	14	16.717,96		
04000	FERIAS 1 OCORRENCIA		19.106,24		
04005	1/3 FERIAS 1 OCORRENCIA		6.368,75		
04010	MEDIA FERIAS 1 OCORRENCIA		14.592,92		
04015	MEDIA 1/3 FERIAS 1 OCORRENCIA		4.864,31		
07202	DEV INSS MES		697,85		
07230	INSS DESCONTADO FERIAS I			1.649,47	
07400	IRRF MES			3.521,73	
07510	IRRF DESCONTADO FERIAS I			10.237,25	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09900	DESCONTO ADIANTAMENTO FERIAS MES I			33.045,50	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				61.650,18
20000	NUM DIAS SALARIO MENSALISTA				14,00

Total de proventos:	62.348,03	Total de descontos:	48.498,35	Total líquido:	**13.849,68**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
61.650,18	61.650,18	4.932,01	16.110,76

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RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/07/2025 a 31/07/2025	1	30/07/2025	07/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	26	31.047,63		
02200	RSU ACOES CORPORATIVAS		276.783,20		
04000	FERIAS 1 OCORRENCIA		4.776,56		
04005	1/3 FERIAS 1 OCORRENCIA		1.592,19		
04010	MEDIA FERIAS 1 OCORRENCIA		3.648,23		
04015	MEDIA 1/3 FERIAS 1 OCORRENCIA		1.216,08		
04020	ABONO PECUNIARIO 1 OCORRENCIA		11.941,39		
04025	1/3 ABONO PECUNIARIO 1 OCORRENCIA		3.980,46		
04030	MEDIA ABONO PECUNIARIO 1 OCORRENCIA		9.120,57		
04035	MEDIA 1/3 ABONO PECUNIARIO 1 OCORRENCIA		3.040,19		
04105	COMPL ABONO PECUNIARIO RECALCULO 1 OCOR		0,01		
07200	INSS MES			697,85	
07230	INSS DESCONTADO FERIAS I			253,77	
07400	IRRF MES			7.385,32	
07510	IRRF DESCONTADO FERIAS I			2.763,07	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			276.783,20	
09800	DESCONTO ADIANTAMENTO QUINZENAL			12.419,05	
09900	DESCONTO ADIANTAMENTO FERIAS MES I			36.298,83	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				319.063,89
20000	NUM DIAS SALARIO MENSALISTA				26,00

Total de proventos:	347.146,51	Total de descontos:	336.645,49	Total líquido:	**10.501,02**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
319.063,89	319.063,89	25.525,11	30.160,19

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RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/06/2025 a 30/06/2025	1	30/06/2025	06/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
02100	BONUS		47.389,00		
07200	INSS MES			951,62	
07400	IRRF MES			21.661,06	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				83.213,19
20000	NUM DIAS SALARIO MENSALISTA				30,00
25305	QTD TOTAL PR GR AD SEM ACRESCIMO				47.389,00

Total de proventos:	83.213,19	Total de descontos:	36.986,76	Total líquido:	**46.226,43**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
83.213,19	83.213,19	6.657,06	82.071,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/05/2025 a 31/05/2025	1	30/05/2025	05/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
07200	INSS MES			951,62	
07400	IRRF MES			8.629,09	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			73,49	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				35.824,19
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	35.824,19	Total de descontos:	24.028,28	Total líquido:	**11.795,91**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
35.824,19	35.824,19	2.865,94	34.682,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/04/2025 a 30/04/2025	1	30/04/2025	04/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
02200	RSU ACOES CORPORATIVAS		336.796,14		
07200	INSS MES			951,62	
07400	IRRF MES			8.641,82	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			336.796,14	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				372.620,33
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	372.620,33	Total de descontos:	360.763,66	Total líquido:	**11.856,67**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
372.620,33	372.620,33	29.809,63	34.682,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/03/2025 a 31/03/2025	1	28/03/2025	03/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
07200	INSS MES			951,62	
07400	IRRF MES			8.641,82	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				35.824,19
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	35.824,19	Total de descontos:	23.967,52	Total líquido:	**11.856,67**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
35.824,19	35.824,19	2.865,94	34.682,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/02/2025 a 28/02/2025	1	28/02/2025	02/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
02200	RSU ACOES CORPORATIVAS		434.284,83		
02250	BONUS LOCAL		6.200,00		
07200	INSS MES			951,62	
07400	IRRF MES			10.346,82	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			434.284,83	
09800	DESCONTO ADIANTAMENTO QUINZENAL			14.329,68	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				476.309,02
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	476.309,02	Total de descontos:	459.957,35	Total líquido:	**16.351,67**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
476.309,02	476.309,02	38.104,72	40.882,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/01/2025 a 31/01/2025	1	30/01/2025	01/2025

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	35.824,19

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	35.824,19		
07200	INSS MES			951,62	
07400	IRRF MES			8.641,82	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			107,58	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.677,27	
11000	SALARIO CONTRATUAL				35.824,19
11505	BASE SEGURO DESEMPREGO				35.824,19
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	35.824,19	Total de descontos:	23.422,69	Total líquido:	**12.401,50**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
35.824,19	35.824,19	2.865,94	34.682,98

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/12/2024 a 31/12/2024	1	30/12/2024	12/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	34.193,18

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	34.193,18		
02100	BONUS		127.315,58		
02280	ANNUAL PERFORMANCE BONUS		153.636,00		
04920	13 SALARIO COMPLEMENTAR	12	23.412,63		
07200	INSS MES			908,85	
07400	IRRF MES			85.466,74	
07410	IRRF 13 SALARIO			6.438,48	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			165,60	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.677,27	
11000	SALARIO CONTRATUAL				34.193,18
11505	BASE SEGURO DESEMPREGO				315.144,76
20000	NUM DIAS SALARIO MENSALISTA				30,00
25305	QTD TOTAL PR GR AD SEM ACRESCIMO				280.951,58
26130	QTD TOTAL PR GR AD SEM ACRESCIMO III				153.636,00

Total de proventos:	338.557,39	Total de descontos:	106.701,34	Total líquido:	**231.856,05**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
315.144,76	338.557,39	27.084,59	56.132,16

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/11/2024 a 30/11/2024	1	29/11/2024	11/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	ENGENHEIRO DE SOFTWARE R&D	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	34.193,18

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	34.193,18		
07200	INSS MES			908,85	
07400	IRRF MES			8.205,05	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				34.193,18
11505	BASE SEGURO DESEMPREGO				34.193,18
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	34.193,18	Total de descontos:	22.437,20	Total líquido:	**11.755,98**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
34.193,18	34.193,18	2.735,45	33.094,74

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/10/2024 a 31/10/2024	1	30/10/2024	10/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02200	RSU ACOES CORPORATIVAS		308.291,87		
02445	REEMBOLSO TELE TRABALHO		271,66		
07200	INSS MES			908,85	
07400	IRRF MES			8.005,88	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			104,40	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			308.291,87	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				341.760,79
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	341.760,79	Total de descontos:	330.634,30	Total líquido:	**11.126,49**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
341.760,79	341.760,79	27.340,86	32.370,48

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/09/2024 a 30/09/2024	1	30/09/2024	09/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02445	REEMBOLSO TELE TRABALHO		271,66		
07200	INSS MES			908,85	
07400	IRRF MES			8.005,88	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				33.468,92
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	33.468,92	Total de descontos:	22.238,03	Total líquido:	**11.230,89**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
33.468,92	33.468,92	2.677,51	32.370,48

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/08/2024 a 31/08/2024	1	30/08/2024	08/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	10	11.065,75		
02445	REEMBOLSO TELE TRABALHO		271,66		
04000	FERIAS 1 OCORRENCIA		22.131,51		
04005	1/3 FERIAS 1 OCORRENCIA		7.377,17		
04010	MEDIA FERIAS 1 OCORRENCIA		3.988,60		
04015	MEDIA 1/3 FERIAS 1 OCORRENCIA		1.329,53		
04020	ABONO PECUNIARIO 1 OCORRENCIA		11.065,75		
04025	1/3 ABONO PECUNIARIO 1 OCORRENCIA		3.688,58		
04030	MEDIA ABONO PECUNIARIO 1 OCORRENCIA		1.994,30		
04035	MEDIA 1/3 ABONO PECUNIARIO 1 OCORRENCIA		664,77		
07230	INSS DESCONTADO FERIAS I			908,85	
07400	IRRF MES			2.066,47	
07510	IRRF DESCONTADO FERIAS I			8.379,30	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			43,63	
08310	VALE REFEICAO			9,40	
09900	DESCONTO ADIANTAMENTO FERIAS MES I			42.952,06	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				46.164,22
20000	NUM DIAS SALARIO MENSALISTA				10,00

Total de proventos:	63.577,62	Total de descontos:	54.394,71	Total líquido:	**9.182,91**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
46.164,22	46.164,22	3.693,14	10.772,61

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/07/2024 a 31/07/2024	1	30/07/2024	07/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02200	RSU ACOES CORPORATIVAS		42.745,30		
02445	REEMBOLSO TELE TRABALHO		271,66		
07200	INSS MES			908,85	
07400	IRRF MES			8.005,88	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08105	CO-PARTICIPACAO ASSISTENCIA MEDICA 1			54,01	
08310	VALE REFEICAO			9,40	
08555	DESC RSU ACOES CORPORATIVA			42.745,30	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				76.214,22
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	76.214,22	Total de descontos:	65.037,34	Total líquido:	**11.176,88**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
76.214,22	76.214,22	6.097,14	32.370,48

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/06/2024 a 30/06/2024	1	28/06/2024	06/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02445	REEMBOLSO TELE TRABALHO		271,66		
07200	INSS MES			908,85	
07400	IRRF MES			8.005,88	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				33.468,92
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	33.468,92	Total de descontos:	22.238,03	Total líquido:	**11.230,89**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
33.468,92	33.468,92	2.677,51	32.370,48

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL	01/05/2024 a 31/05/2024	1	31/05/2024	05/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02445	REEMBOLSO TELE TRABALHO		271,66		
07200	INSS MES			908,85	
07400	IRRF MES			8.005,88	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08310	VALE REFEICAO			9,40	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				33.468,92
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	33.468,92	Total de descontos:	22.238,03	Total líquido:	**11.230,89**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
33.468,92	33.468,92	2.677,51	32.370,48

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		04/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	1	1	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO	30	33.197,26		
02200	RSU ACOES CORPORATIVAS		192.057,86		
07200	INSS MES			908,85	
07400	IRRF MES			7.879,04	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
08555	DESC RSU ACOES CORPORATIVA			192.057,86	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26
11505	BASE SEGURO DESEMPREGO				225.255,12
20000	NUM DIAS SALARIO MENSALISTA				30,00

Total de proventos:	225.255,12	Total de descontos:	214.159,65	Total líquido:	**11.095,47**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
225.255,12	225.255,12	18.020,41	32.098,82

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		03/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	2	0	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO		33.197,26		
07200	INSS MES			908,85	
07400	IRRF MES			7.879,04	
07815	CONTRIBUICAO ASSISTENCIAL			35,00	
09800	DESCONTO ADIANTAMENTO QUINZENAL			13.278,90	
11000	SALARIO CONTRATUAL				33.197,26

Total de proventos:	33.197,26	Total de descontos:	22.101,79	Total líquido:	**11.095,47**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
7.786,02	0,00	0,00	31.909,23

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		02/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	2	0	33.197,26

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO		33.197,26		
00006	DIF SALARIO MENSAL		1.276,82		
07200	INSS MES			908,85	
07400	IRRF MES			8.230,16	
07815	CONTRIBUICAO ASSISTENCIAL			20,00	
09800	DESCONTO ADIANTAMENTO QUINZENAL			12.768,18	
11000	SALARIO CONTRATUAL				33.197,26

Total de proventos:	34.474,08	Total de descontos:	21.927,19	Total líquido:	**12.546,89**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
7.786,02	0,00	2.655,78	33.186,05

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		01/2024

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	2	0	31.920,44

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO		31.920,44		
02605	REEMB ACADEMIA		1.596,00		
07200	INSS MES			908,85	
07400	IRRF MES			7.977,85	
07815	CONTRIBUICAO ASSISTENCIAL			50,00	
09800	DESCONTO ADIANTAMENTO QUINZENAL			12.768,18	
11000	SALARIO CONTRATUAL				31.920,44

Total de proventos:	33.516,44	Total de descontos:	21.704,88	Total líquido:	**11.811,56**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
7.786,02	0,00	2.681,32	32.228,41

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		12/2023

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	2	0	31.920,44

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO		31.920,44		
02200	RSU ACOES CORPORATIVAS		125.824,80		
07200	INSS MES			876,95	
07400	IRRF MES			7.547,73	
08555	DESC RSU ACOES CORPORATIVA			125.824,80	
09800	DESCONTO ADIANTAMENTO QUINZENAL			12.768,18	
11000	SALARIO CONTRATUAL				31.920,44

Total de proventos:	157.745,24	Total de descontos:	147.017,66	Total líquido:	**10.727,58**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
7.507,49	53.447,54	14.757,52	30.664,31

BROADCOM

RECIBO DE PAGAMENTO

Folha:	Período de Pagamento:	Página:	Dt. pagt.:	Referência:
MENSAL		1		11/2023

Nome da empresa:	CNPJ:
VMWARE SOFTWARE E SERVICOS BRASIL LTDA	19.758.880/0001-98

Nome:	Identificador:	CPF:
AMIM MOISES SALUM KNABBEN	001028902	057.799.179-57

CTPS/Série/UF:	Cargo:	Tipo de salário:
62625170/0010/SC	Membro Senior da Equipe Técnica	MENSAL

Lotação:	Data admissão:
100000000 - VMWARE SOFTWARE E SERVICOS BRASIL LTDA	08/09/2021

Endereço da Lotação:	Cidade - Estado:
R SURUBIM ANDAR: 3 E 4; SALA: 32 41 E 42 Nº 504-CIDADE MONCOES	SÃO PAULO-SP

Bco/Ag:	Conta:	Num. Dep. IRRF:	Num. Dep. Sal. Fam.:	Salário contratual:
33/0155	010436519	2	0	31.920,44

Código	Descrição	Qtde	Provento	Desconto	Resultado
00005	SALARIO		31.920,44		
07200	INSS MES			876,95	
07400	IRRF MES			7.547,73	
09800	DESCONTO ADIANTAMENTO QUINZENAL			12.768,18	
11000	SALARIO CONTRATUAL				31.920,44

Total de proventos:	31.920,44	Total de descontos:	21.192,86	Total líquido:	**10.727,58**

Sal. contrib. INSS:	Base cal. FGTS:	FGTS mês:	Base calc. IRPF:
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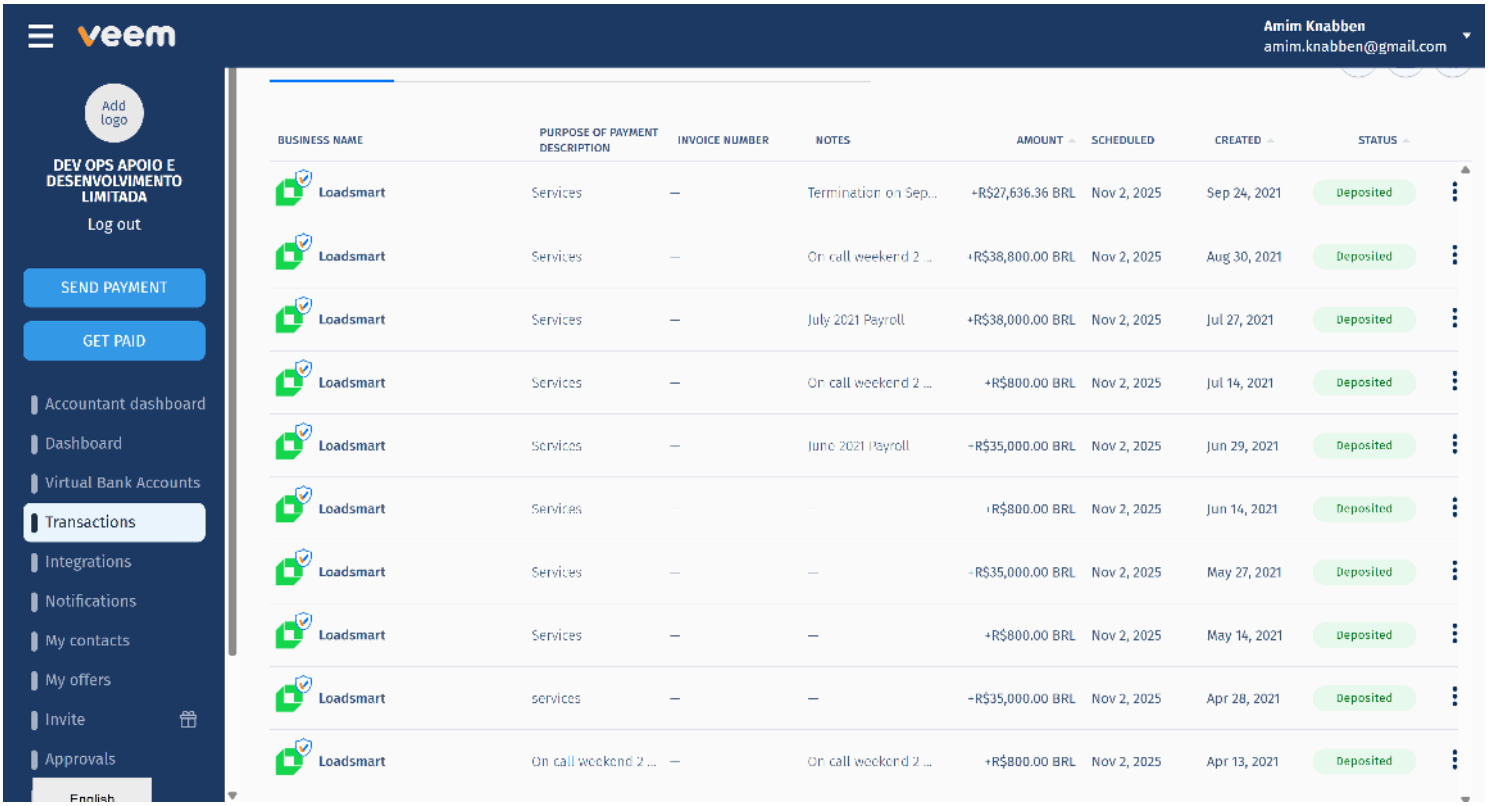

veem
Amim Knabben
amim.knabben@gmail.com
Add logo
DEV OPS APOIO E DESENVOLVIMENTO LIMITADA
Log out
SEND PAYMENT
GET PAID
Accountant dashboard
Dashboard
Virtual Bank Accounts
Transactions
Integrations
Notifications
My contacts
My offers
Invite
Approvals
English
BUSINESS NAME
PURPOSE OF PAYMENT DESCRIPTION
INVOICE NUMBER
NOTES
AMOUNT
SCHEDULED
CREATED
STATUS
Loadsmart Services — Termination on Sep... +R$27,636.36 BRL Nov 2, 2025 Sep 24, 2021 Deposited
Loadsmart Services — On call weekend 2 ... +R$38,800.00 BRL Nov 2, 2025 Aug 30, 2021 Deposited
Loadsmart Services — July 2021 Payroll +R$38,000.00 BRL Nov 2, 2025 Jul 27, 2021 Deposited
Loadsmart Services — On call weekend 2 ... +R$800.00 BRL Nov 2, 2025 Jul 14, 2021 Deposited
Loadsmart Services — June 2021 Payroll -R$35,000.00 BRL Nov 2, 2025 Jun 29, 2021 Deposited
Loadsmart Services +R$800.00 BRL Nov 2, 2025 Jun 14, 2021 Deposited
Loadsmart Services — — -R$35,000.00 BRL Nov 2, 2025 May 27, 2021 Deposited
Loadsmart Services — — +R$800.00 BRL Nov 2, 2025 May 14, 2021 Deposited
Loadsmart services — — -R$35,000.00 BRL Nov 2, 2025 Apr 28, 2021 Deposited
Loadsmart On call weekend 2 ... — On call weekend 2 ... +R$800.00 BRL Nov 2, 2025 Apr 13, 2021 Deposited

Software Engineer Salary in Brazil

How much does a Software Engineer earn in Brazil?

Average base salary

R$ 10,618 **Pay for:** Month

The salary range for a software engineer in Brazil is R$ 10,618 per month. 1.5k salaries reported. Updated April 6, 2026.

Software Engineer positions open in Brazil.

Cities with the highest salaries for the position of Software Engineer near Brazil.

Osasco, SP R$ 14,889 per month 164 salary reported	**Florianópolis, SC** R$ 13,047 per month 94 salary reported	**Campinas, SP** R$ 11,000 per month 161 salary reported
Curitiba, PR R$ 10,759 per month 84 salary reported	**São Paulo, SP** R$ 10,356 per month 43 salary reported	**Belo Horizonte, MG** R$ 10,311 per month 253 salary reported
Porto Alegre, RS R$ 9,926 per month 127 salary reported	**Uberlândia, MG** R$ 9,824 per month 41 salary reported	**Joinville, SC** R$ 7,799 per month 43 salary reported

Exhibit K. Totality of Evidence - Final Merit Determination

FX906538

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.

Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.

This passport must be signed, except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT

TIPO / TYPE: P
PAÍS EMISSOR / ISSUING COUNTRY: BRA
PASSAPORTE Nº / PASSPORT No: FX906538

SOBRENOME / SURNAME
SALUM KNABBEN

NOME / GIVEN NAMES
AMIM MOISES

NACIONALIDADE / NATIONALITY
BRASILEIRO(A)

DATA DO NASCIMENTO / DATE OF BIRTH
10 MAI/MAY 1986

IDENTIDADE Nº / PERSONAL No

SEXO / SEX
M

NATURALIDADE / PLACE OF BIRTH
FLORIANÓPOLIS/SC

FILIAÇÃO / FILIATION
NAZAREU TANCREDO KNABBEN

JANETE SALUM KNABBEN

DATA DE EXPEDIÇÃO / DATE OF ISSUE
15 JAN/JAN 2019

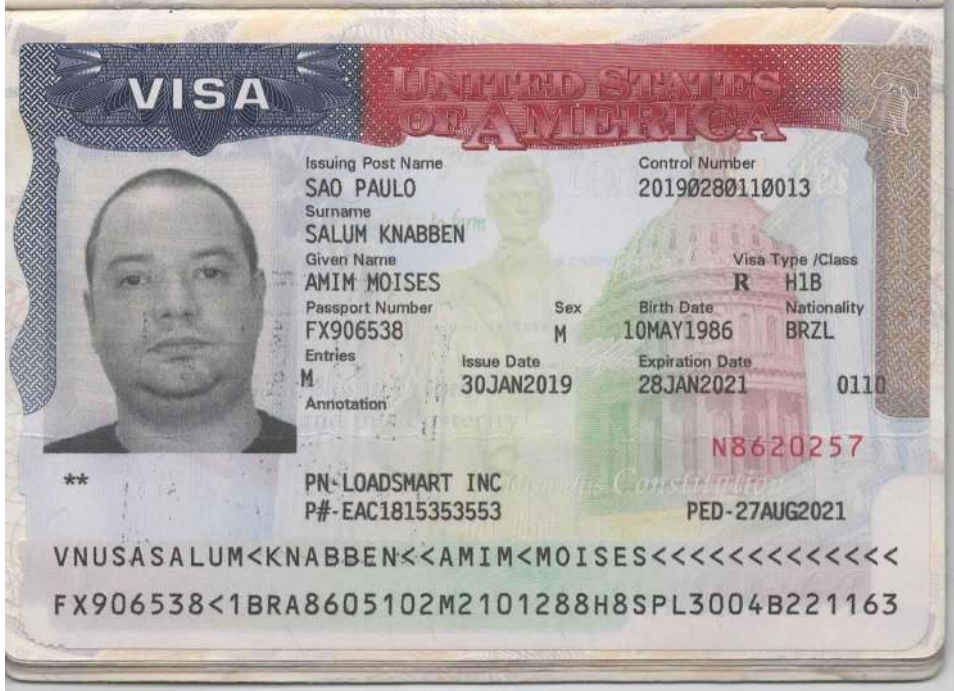
AUTORIDADE / AUTHORITY
SR/DPF/SC

VALIDO ATÉ / DATE OF EXPIRY
14 JAN/JAN 2029

P<BRASALUM<KNABBEN<<AMIM<MOISES<<<<<<<<<<<<<
FX906538<1BRA8605102M2901145<<<<<<<<<<<<<<00

FJ162591
Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular
Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.
Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.
This passport must be signed, except where the bearer is unable to do so.
Este pasaporte debe ser firmado por el titular, salvo en caso de inexpacidad.
REPÚBLICA FEDERATIVA DO BRASIL
PASSAPORTE
PASSPORT
P
BRA
FJ162591
SALUM KNABBEN
AMIM MOISES
BRASILEIRO(A)
10/May/1986
M
FLORIANÓPOLIS/SC
28/Nov/2013
27/Nov/2018
SR/DPF/SC
BRA
P<BRASALUM<KNABBEN<<AMIM<MOISES<<<<<<<<<<<<
FJ162591<2BRA8605102M1811272<<<<<<<<<<<<<<06

LEAVE TO ENTER FOR SIX MONTHS.
EMPLOYMENT AND RECOURSE TO
PUBLIC FUNDS PROHIBITED
IMMIGRATION OFFICER
(3683)
30 MAR 2025
HEATHROW (3)
FEB 10 2019
VISTOS VISAS


VISA
UNITED STATES OF AMERICA
Issuing Post Name
SAO PAULO
Control Number
20190280110013
Surname
SALUM KNABBEN
Given Name
AMIM MOISES
Visa Type /Class
R H1B
Passport Number
FX906538
Sex
M
Birth Date
10MAY1986
Nationality
BRZL
Entries
M
Issue Date
30JAN2019
Expiration Date
28JAN2021
0110
Annotation
N8620257
**
PN-LOADSMART INC
P#-EAC1815353553
PED-27AUG2021
VNUSASALUM<KNABBEN<<AMIM<MOISES<<<<<<<<<<<<<
FX906538<1BRA8605102M2101288H8SPL3004B221163

DEPARTMENT OF HOMELAND SECURITY • U.S. CUSTOMS AND BORDER PROTECTION
ADMITTED
NEW
NOV 04 2017
B1
DEPARTMENT OF HOMELAND SECURITY • U.S. CUSTOMS AND BORDER PROTECTION
ADMITTED
NEW
JUL X8 2017
B1
Aug 01, 2017
VISTOS
VISAS

VISA
UNITED STATES OF AMERICA
Issuing Post Name
SAO PAULO
Control Number
20170330280046
Surname
SALUM KNABBEN
Given Name
AMIM MOISES
Visa Type /Class
R B1/B2
Passport Number
FJ162591
Sex
M
Birth Date
10MAY1986
Nationality
BRZL
Entries
M
Issue Date
03FEB2017
Expiration Date
01FEB2027
0100
Annotation
M0655013
**
VNUSASALUM<KNABBEN<<AMIM<MOISES<<<<<<<<<<<<
FJ162591<2BRA8605102M2702010B3SPL2MXA6921191

REQUEST YOUR CERTIFICATES DIRECTLY AT REGISTROCIVIL.ORG.BR AND AVOID INTERMEDIARIES

FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

BIRTH CERTIFICATE

Name
AMIM MOISÉS SALUM KNABBEN

CPF
057.799.179-57

Registration
105197 01 55 1986 1 00126 226 0040681 11

Date of birth	Day	Month	Year
May tenth, nineteen eighty-six	10	05	1986

Time of birth	Municipality of birth	State
5:10 AM	Florianópolis	SC

Place of birth	City of Birth	State	Sex
Home, in this Capital	Florianópolis	SC	male

Parent's name	City of birth	State
Nazreu Tancredo Knabben	No record	SC

Respective Grandparents
Jacob Knabben; Dinorá Tancredo Knabben;

Parent's name	Municipality of birth	State
Janete Salum Knabben	No record	SC

Respective Grandparents
Amin Abrahão Salum; Luiza Moysés Salum;

Registration Date	DNV (NUMBER OF LIVE BIRTH CERTIFICATE)
May thirteenth, nineteen eighty-six	NO RECORD

Notes/Annotations
Annotation: Amim Moisés Salum Knabben married Libiane Fernandes on 09/09/2013 at this registry office, according to record 12122, page 291, book B 88, Florianópolis/Santa Catarina, 09/09/2013.

Voluntary registration notes
NO RECORD

CNS No. 105197
Civil Registry Office of Natural Persons
Florianópolis - 1st Registry Office - Santa Catarina

Iolé Luz Faria - Registrar

Rua Emílio Blum, No. 131 - Centro, ZIP Code: 88020010 - Fone: (48)32252470
email: civil@cartorioflorianopolis.com.br

The content of the certificate is true. I certify.

Florianópolis - Santa Catarina, 10/16/2025.

Digital seal: HPX97174-YNGM
Amount charged for this certificate: R$ 49.02

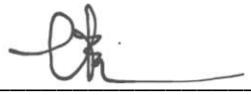
CIVIL registry

Electronically signed by: Filipe Umbelino Silva - 10/16/2025 9:32:38 AM, pursuant to Article 19 of Law No. 6,015/73, and Article 228-F of the National Code of Norms of the Judicial Administrative Department of the National Council of Justice - Extrajudicial Forum (CNN/CN/CNJ-Extra)
CNS (Civil Registry Number): 105197 - Clerk - SC - Florianópolis - 1st Registry Office
Validation: https://certidao.registrocivil.org.br/validar Validation Code: fril-mmu9
Click here to validate the certificate

SERP: Electronic System for the Provision of Persons / RCPN: Civil Registry of Natural Persons

The QR Code of the inspection seal of the State Courts of Justice will be available in the validation table of this certificate at the address mentioned below when it is not present in the certificate itself. This certificate may be issued in physical form within 30 days from the date of its issuance at any Civil Registry Office for Natural Persons in Brazil.

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: January 22, 2026.

SOLICITE SUAS CERTIDÕES DIRETAMENTE NO REGISTROCIVIL.ORG.BR E EVITE INTERMEDIÁRIOS

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE NASCIMENTO

Nome
AMIM MOISÉS SALUM KNABBEN

Número do CPF: **057.799.179-57**

Matrícula
105197 01 55 1986 1 00126 226 0040681 11

Data de nascimento	Dia	Mês	Ano
dez de maio de um mil e novecentos e oitenta e seis	10	05	1986

Horário de nascimento	Município da naturalidade	UF
05:10 horas	Florianópolis	SC

Local de nascimento	Município de nascimento	UF	Sexo
Domicilio,Nesta Capital	Florianópolis	SC	masculino

Nome do(a) genitor(a)	Município de nascimento	UF
Nazreu Tancredo Knabben	Nao informado	SC

Avô(ó)(s) respectivo(s): **Jacob Knabben; Dinorá Tancredo Knabben;**

Nome do(a) genitor(a)	Município de nascimento	UF
Janete Salum Knabben	Nao informado	SC

Avô(ó)(s) respectivo(s): **Amin Abrahão Salum; Luiza Moysés Salum;**

Data de registro	DNV
treze de maio de um mil e novecentos e oitenta e seis	NÃO CONSTA

Anotações/Averbações:
Anotação: Amim Moisés Salum Knabben, casou-se com Libiane Fernandes, no dia 09/09/2013, neste ofício, conforme registro 12122, folha 291, do livro B 88, Florianópolis/SC, 09/09/2013.

Anotações voluntárias de cadastro: **NÃO CONSTA**

CNS Nº 105197
Oficial de Registro Civil das Pessoas Naturais
Florianópolis - 1º Oficio - SC

Iolé Luz Faria - Oficial

Rua Emílio Blum, nº 131 - Centro CEP: 88020010 - Fone: (48)32252470
e-mail: civil@cartorioflorianopolis.com.br

O Conteúdo da certidão é verdadeiro. Dou fé.

Florianopolis - SC, 16/10/2025.

Selo digital: HPX97174-YNGM
Valor cobrado por esta certidão: R$ 49,02

Assinado eletronicamente por: Filipe Umbelino Silva - 16/10/2025 09:32:38 , nos termos do artigo 19 da Lei nº 6.015/73, e do artigo 228-F do Código Nacional de Normas da Corregedoria Nacional de Justiça do Conselho Nacional de Justiça - Foro Extrajudicial (CNN/CN/CNJ-Extra)
CNS: 105197 - Escrevente - SC - Florianópolis - 1º Oficio
Validação: https://certidao.registrocivil.org.br/validar Código Validador: fril-mmu9
Clique aqui para validar a certidão

O QR Code do selo de fiscalização dos Tribunais de Justiça Estaduais estará disponível na tela de validação desta certidão no endereço mencionado abaixo quando não estiver presente na própria certidão. Esta certidão poderá ser materializada em até 30 dias da data de sua emissão em qualquer Ofício de Registro Civil de Pessoas Naturais do Brasil.

UNIVERSITY OF SOUTHERN SANTA CATARINA

The President of the University of Southern Santa Catarina, in the exercise of his duties and in view of the completion of the Higher Education Program in Financial Management on December 21, 2018, confers the degree of Technologist in Financial Management to

AMIM MOISÉS SALUM KNABBEN

holder of Identity Card No. 4821578 SESP/SC, Brazilian, born on May 10, 1986, in the State of Santa Catarina, hereby granted this Diploma, entitling him to all legal rights and privileges.

Tubarão (Santa Catarina), February 7, 2019

AMIM MOISÉS SALUM KNABBEN	SOLANGE ANTUNES DE SOUZA	BERNARDINO JOSÉ DA SILVA	MAURI LUIZ HEERDT
Graduate	*General Secretary of Education*	*Coordinator*	*President*

080159

Graduate: AMIM MOISÉS SALUM KNABBEN

UNIVERSITY OF SOUTHERN SANTA CATARINA - UNISUL

Establishment: Municipal Law No. 443, 10/18/ 1967 - Transformation into a University: Law No. 1,388/1989
Recognition: MEC (Ministry of Education) Ordinance No. 28, 01/27/1989, published in the Official Gazette on 01/30/1989
Renewal of Accreditation: Decree No. 780, 11/06/2007, published in the State Official Gazette on 11/06/2007
Reaccreditation: MEC Ordinance No. 197, 03/07/2018, published in the Official Gazette on 03/08/2018
Distance Education Authorization: Ordinance No. 238, 02/21/2003, published in the Official Gazette on 02/24/2003
Distance Education Accreditation: Ordinance No. 1,067, 05/08/2003, published in the Official Gazette on 05/09/2003
Distance Education Authorization: Ordinance No. 2,146, 07/16/2004, published in the Official Gazette on 07/20/2004

Program: Higher Education Program in Financial Management

Authorization: MEC Ordinance No. 238, of 02/21/2003, published in the Official Gazette on 02/24/2003
Creation: CÂMGES Resolution No. 3, of 04/16/2003
Authorization: Decree No. 944, of 10/23/2003, published in the State Official Gazette of Santa Catarina on 10/23/2003
Transformation: CÂMGES Resolution No. 2, of 03/28/2005
Transformation: Decree No. 3,122, of 05/09/2005, published in the State Official Gazette of Santa Catarina on 05/09/2005
Recognition: Decree No. 4,619, of 08/08/2006, published in the State Official Gazette of Santa Catarina on 08/08/2006
Change of Name: CÂMGES Resolution No. 73, of 12/20/2006
Renewal of Recognition: Decree No. 1,104, of 08/06/2012, published in the State Official Gazette of Santa Catarina on 08/07/2012
Renewal of Recognition: Decree No. 2,237, of 06/10/2014, published in the State Official Gazette of Santa Catarina on 06/11/2014
Renewal of Recognition: Ordinance No. 274, of 04/03/2017, published in the Official Gazette on 04/04/2017

Vice President's Office of Administration and Academic Services - Pró-ASA
General Secretariat of Education - GSE

Diploma registered under No. 14560, Book TECV - 19, pages 162, on 03/01/2019.

Process No. 806-527214-GRAD-2019.

In accordance with Article 48 of Law No. 9.394, of 12/20/1996 – Law of Guidelines and Bases of National Education.

Tubarão (Santa Catarina), 03/01/2019

MICHELE DOS SANTOS ESPINDOLA BALSINI
Registration of Diplomas and Certificates
President's Delegation - Ordinance No. 1297/201

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

Date: December 29, 2025.

UNIVERSIDADE DO SUL DE SANTA CATARINA

O Reitor da Universidade do Sul de Santa Catarina, no uso de suas atribuições e tendo em vista a conclusão do Curso Superior de Tecnologia em Gestão Financeira, em 21 de dezembro de 2018, confere o título de Tecnólogo em Gestão Financeira a

AMIM MOISÉS SALUM KNABBEN

portador da carteira de identidade nº 4821578 - SESP/SC, de nacionalidade brasileira, nascido em 10 de maio de 1986, natural do Estado de Santa Catarina, outorgando-lhe o presente Diploma, para que lhe sejam assegurados todos os direitos e prerrogativas legais.

Tubarão (SC), 7 de fevereiro de 2019

AMIM MOISÉS SALUM KNABBEN	SOLANGE ANTUNES DE SOUZA	BERNARDINO JOSÉ DA SILVA	MAURI LUIZ HEERDT
Diplomado	*Secretária Geral de Ensino*	*Coordenador*	*Reitor*

080159

Aluno: AMIM MOISÉS SALUM KNABBEN

UNIVERSIDADE DO SUL DE SANTA CATARINA - UNISUL
Criação: Lei Municipal nº 443, 18/10/1967 - Transformação em Universidade: Lei nº 1.388/1989
Reconhecimento: Portaria MEC nº 28, de 27/1/1989, publicada no D.O.U. de 30/1/1989
Renovação do Credenciamento: Decreto nº 780, de 6/11/2007, publicado no DOE-SC de 6/11/2007
Recredenciamento: Portaria MEC nº 197, de 7/3/2018, publicada no D.O.U. de 8/3/2018
Autorização à distância: Portaria nº 238, de 21/2/2003, publicada no D.O.U. de 24/2/2003.
Credenciamento à distância: Portaria nº 1.067, de 8/5/2003, publicada no D.O.U. de 9/5/2003.
Autorização à distância: Portaria nº 2.146, de 16/7/2004, publicada no D.O.U. de 20/7/2004.

Curso: Curso Superior de Tecnologia em Gestão Financeira

Autorização: Portaria MEC Nº 238 de 21/2/2003, publicada no D.O.U. de 24/2/2003
Criação: Resolução CÂMGES Nº 3 de 16/4/2003
Autorização: Decreto Nº 944 de 23/10/2003, publicado no D.O.E. SC de 23/10/2003
Transformação: Resolução CÂMGES Nº 2 de 28/3/2005
Transformação: Decreto Nº 3.122 de 9/5/2005, publicado no D.O.E. SC de 9/5/2005
Reconhecimento: Decreto Nº 4.619 de 8/8/2006, publicado no D.O.E. SC de 8/8/2006
Alteração de Nomenclatura: Resolução CÂMGES Nº 73 de 20/12/2006
Renovação do Reconhecimento: Decreto Nº 1.104 de 6/8/2012, publicado no D.O.E. SC de 7/8/2012
Renovação do Reconhecimento: Decreto Nº 2.237 de 10/6/2014, publicado no D.O.E. SC de 11/6/2014
Renovação de Reconhecimento: Portaria Nº 274 de 3/4/2017, publicado no D.O.U. de 4/4/2017

Pró-Reitoria de Administração e Serviços Acadêmicos - Pró-ASA
Secretaria Geral de Ensino - SGE

Diploma registrado sob nº 14560, livro TECV - 19, folhas 162, em 1/3/2019.

Processo nº 806-527214-GRAD-2019.

Nos termos do Art 48 da Lei nº 9.394, de 20/12/1996 - Lei de Diretrizes e Bases da Educação Nacional.

Tubarão (SC), 1/3/2019

MICHELE DOS SANTOS ESPINDOLA BALSINI
Registro de Diplomas e Certificados
Delegação do Reitor Portaria GR nº 1297/2011

European University of the Atlantic

The President of the European University of the Atlantic

on the recommendation of its faculty, grants

[The text in this column contains the exact same content as the one on the left, but in Portuguese]

AMIM MOISÉS SALUM KNABBEN

with identification document no. 4821578

who has satisfactorily fulfilled all the requirements demanded by the Examination Committee, conferring the degree of

Master's in Strategic Management in Software Engineering

[The text in this column contains the exact same content as the one on the left, but in Portuguese]

with all the rights and privileges corresponding to this degree.
This graduate program consists of 90 ECTS.
Issued in Santander (Spain) on June 23, 2023.

The President

Rubén Calderón Iglesias

Head of Graduate Diplomas Section

Silvia Báguena Villalobos

Title Registration: F13684 / 2023

This specific degree is awarded in accordance with the provisions of Article 34.1 of Organic Law 6/2001 on Universities, of December 21, without affecting the degrees officially issued by the President of H. M. the King.

European University of the Atlantic

IT IS HEREBY RESOLVED

that AMIM MOISÉS SALUM KNABBEN, with identification document no. 4821578, has satisfactorily completed the Master's Degree in Strategic Management in Software Engineering program with a course load of 90 credits and a duration of 24 months. This program is covered by the Framework Collaboration Agreement signed between the European University of the Atlantic and the Iberoamerican University Foundation (FUNIBER).

The grades obtained are as follows (scale of 0 to 10 points, with 7.0 being the minimum passing grade):

Subjects	Grades
Strategic Management and Planning	9.5
Reengineering, Strategy, and Management of Systems and ICT	8.7
Strategic Human Resource Management	8.2
Information Society and Change	9.1
Conflict Resolution and Negotiation Techniques	8
Team Management Techniques	8.2
Virtual Collaborative Work Environments	9.4
Programming Languages and Paradigms	9.4
Architectures, Networks, and Distributed Systems	9
Web Technology and Web Engineering	8.8
Comprehensive Analysis and Design of Systems and Requirements	9.2
Data Modeling and Database Design	9.4
Network Management and Security	9.4
Database and Information Resource Management	9.4
Software Business Processes	9.2
Business Intelligence and Document Management	8.5
Business Management Systems Integration	8
ICT Project Management	8
Case Study and Resolution	10
Scientific Research Methodology	9.3

Final Thesis	Grade
Cloud-native architecture: infrastructure and application strategies	10

Santander, May 9, 2023.

SILVIA BÁGUENA VILLALOBOS

HEAD OF DIPLOMA SECTION
GRADUATE UNIT

European University of the Atlantic
Cantabria Science and Technology Park
C/Isabel Torres 21 - 39011 Santander: Spain
Tax ID: G39764972

I, Pedro Peski Ribeiro Lopes, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Spanish and Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

_____ **Date: December 16, 2025.**

Universidad Europea del Atlántico

El Rector de la Universidad Europea del Atlántico
O Reitor da Universidad Europea del Atlántico

por recomendación de su Claustro docente otorga a

por recomendação do seu Corpo docente confere a

AMIM MOISÉS SALUM KNABBEN

con documento de identificación nº 4821578

com documento de identificação nº 4821578

quien ha superado satisfactoriamente todos los requisitos exigidos por la Junta de Calificaciones por lo que se confiere el título propio de

quem cumpriu satisfatoriamente todos os requisitos exigidos pela Banca Avaliadora pelo qual se confere o título de

Máster en Dirección Estratégica en Ingeniería de Software

Mestrado em Direção Estratégica em Engenharia de Software

con todos los derechos y privilegios correspondientes a este título.
Este Título propio de Postgrado consta de 90 ECTS.
Expedido en Santander (España) a 23 de junio de 2023.

com todos os direitos e privilégios correspondentes a este título.
Este Programa de Pós-graduação consta de 90 ECTS.
Expedido em Santander (Espanha) em 23 de junho de 2023.

El Rector
O Reitor

Rubén Calderón Iglesias

Jefa Sección Títulos de Postgrado
Chefe Secão Diplomas de Pós-Graduação

Silvia Báguena Villalobos

Registro de Títulos : F 13684 / 2023

Este Título propio se otorga conforme a lo dispuesto en el art. 34.1 de la Ley Orgánica 6/2001 de Universidades, de 21 de diciembre, de partida de los Títulos que son de carácter oficial se expiden por el Rector en nombre de S.M. el Rey.
O presente Título próprio é concedido em conformidade com o disposto no art. 34.1 da Lei Orgânica 6/2001 de Universidades, de 21 de dezembro, sendo títulos oficiais com validade oficial pelo Reitor em nome de S.M. o Rei.

Universidad Europea del Atlántico

DISPÕE-SE

Que AMIM MOISÉS SALUM KNABBEN, com documento de identificação n° 4821578, concluiu satisfatoriamente o programa do Título Próprio de Máster en Dirección Estratégica en Ingeniería de Software com carga letiva de 90 créditos e duração de 24 meses. Este programa se encontra sob o amparo do Convênio Marco de Colaboração firmado entre a Universidad Europea del Atlántico e a Fundação Universitária Iberoamericana (FUNIBER).

As notas obtidas são as seguintes (escala de 0 a 10 pontos, sendo 7,0 a nota mínima de aprovação):

Disciplinas	Notas
Dirección y Planificación Estratégica	9.5
Reingeniería, Estrategia y Dirección de Sistemas y TIC	8.7
Gestión Estratégica de los Recursos Humanos	8.2
Sociedad de la Información y del Cambio	9.1
Técnicas de resolución de conflictos y negociación	8
Técnicas de Dirección de Equipos de Trabajo	8.2
Entornos virtuales de trabajo Colaborativo	9.4
Lenguajes y Paradigmas de Programación	9.4
Arquitecturas, Redes y Sistemas Distribuidos	9
Tecnología Web y Web Engineering	8.8
Análisis y Diseño Integral de Sistemas y Requerimientos	9.2
Modelamiento de Datos y Diseño de Bases de Datos	9.4
Gestión y Seguridad de Redes	9.4
Gestión de Bases de Datos y Recursos de Información	9.4
Proceso de Negocio de Software	9.2
Business Intelligence y Gestión Documental	8.5
Integración de los Sistemas de Gestión Empresarial	8
Dirección y Gestión de Proyectos TIC	8
Estudio y Resolución de Casos	10
Metodología de la investigación científica	9.3

Projeto Final	Nota
Arquitetura nativa em nuvem: estratégias de infraestrutura e aplicações	10

Santander, a 09 de maio de 2023.

SILVIA BÁGUENA VILLALOBOS

CHEFE SEÇÃO DE DIPLOMAS
UNIDADE DE PÓS-GRADUAÇÃO

Universidad Europea del Atlántico
Parque Científico y Tecnológico de Cantabria
C/Isabel Torres 21 · 39011 Santander, España
CIF: G39764972

SENAC UNIVERSITY CENTER

Reaccreditation Ordinance MEC *(Ministry of Education)* No. 494, of 04/11/2017 - Federal Official Gazette No. 71, Section 1, page 13 of 04/12/2017

Avenida Eng. Eusébio Stevaux, 823 - Santo Amaro - São Paulo - State of São Paulo - ZIP Code: 04696-000

ACADEMIC TRANSCRIPT

Lato Sensu Graduate Program: **SPECIALIZATION IN CLOUD COMPUTING**

Legal Basis: **CONSUNI *(University Council)* Resolution No. 010/2016, of 09/28/2015, published on 09/28/2015**

Nome: **Amim Moisés Salum Knabben** Student ID: **1142197869**

Birth Date: 05/10/1986 Born in: Santa Catarina Nationality: Brazilian

ID No. 4.821.578/SC

Year	Subjects	Workload	Grade	Status	Professor	Degree
2020	CLOUD APPLICATIONS	32h	9.5	Approved	Vladimir Aparecido Esteves	Master's
2020	CLOUD COMPUTING SOLUTION ARCHITECTURE	32h	9.5	Approved	Adenilson Boccato de Almeida	Master's
2020	FUNDAMENTALS OF CLOUD COMPUTING	40h	9.5	Approved	Adenilson Boccato de Almeida	Master's
2020	CAPSTONE PROJECT I: METHODOLOGY	16h	10	Approved	Dirceu Matheus Junior	Master's
2021	ASSESSMENT OF CLOUD COMPUTING USAGE	32h	8.5	Approved	Monica Mancini	Doctorate
2021	CLOUD SERVICES MANAGEMENT	40h	8.0	Approved	Maria Helena Mauro	Master's
2021	IMPLEMENTATION AND MIGRATION TO CLOUD COMPUTING	24h	9.0	Approved	Vladimir Aparecido Esteves	Master's
2021	INFRASTRUCTURE AND PLATFORM AS A SERVICE	40h	8.5	Approved	Alexandre Lopes Machado	Doctorate
2021	CLOUD COMPUTING SECURITY	32h	9.5	Approved	Monica Mancini	Doctorate
2021	TRENDS AND INNOVATION IN CLOUD COMPUTING	40h	8.5	Approved	Alexandre Lopes Machado	Doctorate
2021	CAPSTONE PROJECT II: DEVELOPMENT	16h	8.5	Approved	Vladimir Aparecido Esteves	Master's
2021	CAPSTONE PROJECT III: COMPLETION	16h	8.5	Approved	Vladimir Aparecido Esteves	Master's

Total program workload:	360h
Total workload completed:	360h

Period of attendance: 08/12/2020 to 11/14/2021

Program Completion Date: 04/07/2022 Certificate Issuance Date: 06/22/2022

Capstone Project Title: Machine learning operations on cloud-native infrastructure
Grade: 8.5

We hereby declare that the aforementioned program complies with all provisions of CNE/CES *(National Education Council / Higher Education Chamber)* Resolution No. 1, of 04/06/2018 - Federal Official Gazette of 04/09/2018.

This document contains no amendments or erasures. All unused spaces are considered void for all purposes.

São Paulo, July 7, 2022

-----//**Signature**//----
Maria Stela Reis Crotti
Director of Student Relations and Services
ID No. 12.367.251-X/SP

FEDERATIVE REPUBLIC OF BRAZIL
ORDER AND PROGRESS

Senac

SENAC UNIVERSITY CENTER

The Director of Graduate and Extension Programs of Senac University Center, in the exercise of his duties and in view of the results achieved, awards this graduate lato sensu certificate - specialization in

Cloud Computing

field of knowledge: information and communication technologies to

Amim Moisés Salum Knabben

Brazilian, born in the State of Santa Catarina, on May tenth, 1986,
ID No. 4.821.578 - SESPDC/SC

and hereby grants this certificate in accordance with the provisions of CNE/CES Resolution No. 1, of 04/06/2018.

São Paulo, June 22, 2022

Maria Stela Reis Crotti
Director of Student Relations and Services

Alcir Vilela Junior
Director of Graduate and Extension Programs

Graduate

SENAC UNIVERSITY CENTER
Reaccredited by MEC Ordinance No. 494 of 04/11/2017
Federal Official Gazette of 04/12/2017
Director of graduate and extension programs: Alcir Vilela Junior
Director of student relations and services: Maria Stela Reis Crotti

SENAC UNIVERSITY CENTER
Directorate of Student Relations and Services
Certificates and Diplomas Records Department

Certificate registered in accordance with the provisions of §1 of Article 8 of CNE/CES Resolution No. 1, of 04/06/2018 - Federal Official Gazette of 04/09/2018.

Case No. 022.0000035677

Registration No. 0000035677

São Paulo, June 22, 2022

Marcia Aparecida da Silva Lima
Records Coordinator

Glossary:
CNE/CES: National Education Council / Higher Education Chamber
MEC: Ministry of Education
SENAC: National Service for Commercial Learning

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I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.

_____ Date: December 29, 2025.

CENTRO UNIVERSITÁRIO SENAC

Portaria de recredenciamento MEC nº 494, de 11/4/2017 - DOU nº 71, Seção 1, página 13, de 12/4/2017

Av. Eng. Eusébio Stevaux, 823 - Santo Amaro - São Paulo - SP - CEP:04696-000

HISTÓRICO ESCOLAR

Curso de Pós-graduação lato sensu: **ESPECIALIZAÇÃO EM CLOUD COMPUTING**

Fundamentação legal: **Resolução CONSUNI nº 010/2016, de 28/9/2015, publicada em 28/9/2015**

Nome: **Amim Moisés Salum Knabben** RA: **1142197869**

Data de nascimento: 10/05/1986 Natural do Estado: Santa Catarina Nacionalidade: brasileira

RG nº 4.821.578/SC

Ano	Componentes Curriculares	C.H.	Nota Final	Resultado	Docente	Qualificação
2020	APLICATIVOS EM NUVEM	32:00	9,5	Aprovado	Vladimir Aparecido Esteves	Mestre
2020	ARQUITETURA DE SOLUÇÃO DE COMPUTAÇÃO EM NUVEM	32:00	9,5	Aprovado	Adenilson Boccato de Almeida	Mestre
2020	FUNDAMENTOS DE COMPUTAÇÃO EM NUVEM	40:00	9,5	Aprovado	Adenilson Boccato de Almeida	Mestre
2020	TRABALHO DE CONCLUSÃO DE CURSO I: METODOLOGIA	16:00	10	Aprovado	Dirceu Matheus Junior	Mestre
2021	AVALIAÇÃO DO USO DE COMPUTAÇÃO EM NUVEM	32:00	8,5	Aprovado	Monica Mancini	Doutora
2021	GERENCIAMENTO DE SERVIÇOS EM NUVEM	40:00	8,0	Aprovado	Maria Helena Mauro	Mestra
2021	IMPLEMENTAÇÃO E MIGRAÇÃO PARA COMPUTAÇÃO EM NUVEM	24:00	9,0	Aprovado	Vladimir Aparecido Esteves	Mestre
2021	INFRAESTRUTURA E PLATAFORMA COMO SERVIÇO	40:00	8,5	Aprovado	Alexandre Lopes Machado	Doutor
2021	SEGURANÇA NA COMPUTAÇÃO EM NUVEM	32:00	9,5	Aprovado	Monica Mancini	Doutora
2021	TENDÊNCIAS E INOVAÇÃO COM COMPUTAÇÃO EM NUVEM	40:00	8,5	Aprovado	Alexandre Lopes Machado	Doutor
2021	TRABALHO DE CONCLUSÃO DE CURSO II: DESENVOLVIMENTO	16:00	8,5	Aprovado	Vladimir Aparecido Esteves	Mestre
2021	TRABALHO DE CONCLUSÃO DE CURSO III: CONCLUSÃO	16:00	8,5	Aprovado	Vladimir Aparecido Esteves	Mestre

Total da carga horária do curso:	360:00
Total da carga horária cursada:	360:00

Período de realização: 12/08/2020 a 14/11/2021

Conclusão do curso: 07/04/2022 | Data de expedição do certificado: 22/06/2022

Título do TCC: Operações de aprendizado de máquina em infraestrutura nativas em nuvem
Nota: 8,5

Declaramos que o referido curso cumpre todas as disposições da Resolução CNE/CES nº 1, de 6/4/2018 - DOU de 9/4/2018.

O presente documento não contém emendas ou rasuras. Ficam para todos os efeitos invalidados os espaços inutilizados.

São Paulo, 7 de julho de 2022

Maria Stela Reis Crotti
Diretora de relacionamento e serviços ao aluno
RG nº 12.367.251-X/SP

Operador do Sistema: SECRETARIA_ACADEMICA em 07/07/2022 às 21:41

Senac

CENTRO UNIVERSITÁRIO SENAC

O diretor de pós-graduação e extensão do Centro Universitário Senac, no uso de suas atribuições e tendo em vista os resultados obtidos, confere o certificado de pós-graduação lato sensu - especialização em

Cloud Computing

área de conhecimento: tecnologias da informação e comunicação a

Amim Moisés Salum Knabben

nacionalidade brasileira, natural do Estado de Santa Catarina, nascido a 10 de maio de 1986,
RG nº 4.821.578 - SESPDC/SC

e outorga-lhe o presente certificado, de acordo com o disposto na Resolução CNE/CES nº 1, de 6/4/2018.

São Paulo, 22 de junho de 2022

Maria Stela Reis Crotti
Diretora de relacionamento e serviços ao aluno

Alcir Vilela Junior
Diretor de pós-graduação e extensão

Concluinte

CENTRO UNIVERSITÁRIO SENAC
Recredenciado pela Portaria MEC nº 494, de 11/4/2017
Diário Oficial da União de 12/4/2017
Diretor de pós-graduação e extensão: Alcir Vilela Junior
Diretora de relacionamento e serviços ao aluno: Maria Stela Reis Crotti

CENTRO UNIVERSITÁRIO SENAC
Diretoria de Relacionamento e Serviços ao Aluno
Setor de Registros de Certificados e Diplomas

Certificado registrado de acordo com o disposto no § 1º do art. 8º da Resolução CNE/CES nº 1, de 6/4/2018 - DOU de 9/4/2018.

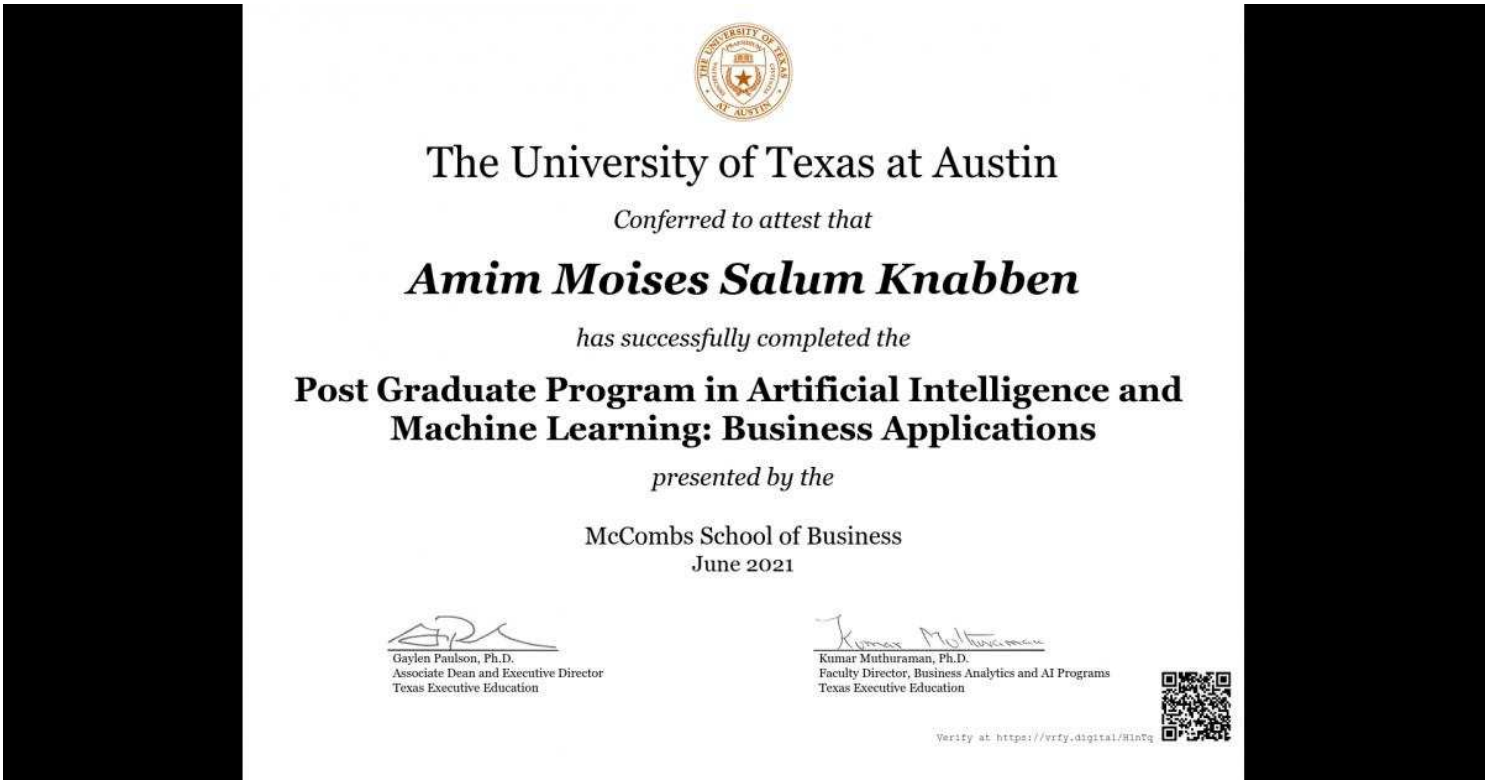
Processo nº 2022.0000035677

Registro nº 0000035677

São Paulo, 22 de junho de 2022

Marcia Aparecida da Silva Lima
Coordenadora de registros

FSC
www.fsc.org
MISTO
Papel produzido a partir de fontes responsáveis
FSC® C126427



The University of Texas at Austin

Conferred to attest that

Amim Moises Salum Knabben

has successfully completed the

Post Graduate Program in Artificial Intelligence and Machine Learning: Business Applications

presented by the

McCombs School of Business
June 2021

Gaylen Paulson, Ph.D.
Associate Dean and Executive Director
Texas Executive Education

Kumar Muthuraman, Ph.D.
Faculty Director, Business Analytics and AI Programs
Texas Executive Education

Verify at https://vrfy.digital/H1nTq

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Prometheus Certified Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 22, 2025
DATE OF COMPLETION

LF-q41nz5h0cr
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit http://training.linuxfoundation.org/certification/verify

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

OpenTelemetry Certified Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 25, 2025
DATE OF COMPLETION

LF-66vok3vbzs
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

Linux Professional Institute

Amim Salum

has fulfilled the qualifications and achieved all requirements of the Institute's program

LPIC-2

and is entitled to all honours and privileges associated with this achievement.

Issued in Toronto, Ontario, Canada

19th of July, 2010

Chairman of the Board

Executive Director

This certificate is not proof of certification, please visit:

lpi.org/v/LPI000190753/vjtjt2dfgs

Linux Professional Institute and the circle-L logo are trademarks and registered trademarks (in Japan and the European Union) of Linux Professional Institute Inc. All Rights Reserved.

Linux Professional Institute

Amim Salum

has fulfilled the qualifications and achieved all requirements of the Institute's program

LPIC-1

and is entitled to all honours and privileges associated with this achievement.

Issued in Toronto, Ontario, Canada

10th of November, 2009

Chairman of the Board

Executive Director

This certificate is not proof of certification, please visit:

lpi.org/v/LPI000190753/7yq34ndhk6

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The Linux Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program requirements
necessary to be recognized as a

Linux Foundation Certified System Administrator (LFCS)

JIM ZEMLIN, EXECUTIVE DIRECTOR THE LINUX FOUNDATION	November 02, 2025 DATE OF COMPLETION	LF-b8h0zkwuab CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Kubernetes and Cloud Native Security Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 18, 2025
DATE OF COMPLETION

LF-oxrh3vslm0
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Kubernetes and Cloud Native Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 13, 2025
DATE OF COMPLETION

LF-l4z2b00bb5
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Istio Certified Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

November 02, 2025
DATE OF COMPLETION

LF-w4ogs16pj4
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Linux Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Cilium Certified Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 18, 2025
DATE OF COMPLETION

LF-548dkn4nyi
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Kubernetes Security Specialist

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 30, 2025
DATE OF COMPLETION

LF-6ng9jtzb3s
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Kubernetes Application Developer

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 22, 2025
DATE OF COMPLETION

LF-x52yhfj908
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Kubernetes Administrator

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 25, 2025
DATE OF COMPLETION

LF-udpy4pwrx2
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

CD Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program requirements to be recognized as a

Certified GitOps Associate

JIM ZEMLIN, EXECUTIVE DIRECTOR
THE LINUX FOUNDATION

October 15, 2025
DATE OF COMPLETION

LF-ivng0yzj1u
CERTIFICATE ID NUMBER

To verify the status of this certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Cloud Native Platform Engineering Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 17, 2025
DATE OF COMPLETION

LF-efqyeesgfm
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Cloud Native Computing Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Backstage Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 26, 2025

DATE OF COMPLETION

LF-a0xu7fw62k

CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

The Linux Foundation hereby certifies that

Amim Moises Salum Knabben

has successfully completed the program
requirements to be recognized as a

Certified Argo Project Associate

Jonathan Bryce

JONATHAN BRYCE, EXECUTIVE DIRECTOR,
CLOUD AND INFRASTRUCTURE

October 16, 2025
DATE OF COMPLETION

LF-64atf4wwoi
CERTIFICATE ID NUMBER

To verify the status of this Certificate, please visit **http://training.linuxfoundation.org/certification/verify**

AWS Certified Solutions Architect - Associate

Notice of Exam Results

Candidate: Amim Knabben	Exam Date: 8/27/2022
Candidate ID: AWS01222919	Registration Number: 424915547
Candidate Score: 796	Pass/Fail: PASS

Congratulations! You have successfully completed the AWS Certified Solutions Architect - Associate and you are now AWS Certified.

The AWS Certified Solutions Architect - Associate (SAA-C02) has a scaled score between 100 and 1,000. The scaled score needed to pass the exam is 720.

As a reminder, you are bound by the Candidate Code of Conduct you accepted when taking your exam, and you are expected to keep the contents of the examination secure. If you have any questions or require assistance, please contact us.

Congratulations again on your achievement and the ability to claim the associated benefits, such as digital badges and discount vouchers for future exams. To take advantage of the benefits associated with your AWS Certified Solutions Architect - Associate certification, explore the “Benefits” section of your AWS Certification Account.

Thank you,

AWS Training and Certification

aws training and certification

AWS Certified Solutions Architect - Associate

Breakdown of Exam Results

The information in the table below details the composition of the AWS Certified Solutions Architect - Associate and your performance in each of the exam sections. The table includes the classifications of your performance at each **section level**.

This information is designed to provide general feedback concerning your examination performance. The examination is scored using a compensatory scoring model, which means you do not need to "pass" the individual sections. Please keep in mind that each section has a specific weighting on the examination, so some sections have more questions than others. This information is general in nature, highlighting your strengths and weaknesses.

Meets Competencies: Performance at this level demonstrates knowledge, skills, and abilities expected of a passing candidate.

Needs Improvement: Performance at this level does not demonstrate knowledge, skills, and abilities expected of a passing candidate.

		Score Performance	
Section	**% of Scored Items**	**Needs Improvement**	**Meets Competencies**
Domain 1: Design Resilient Architectures	30%		
Domain 2: Design High-Performing Architectures	28%		
Domain 3: Design Secure Applications and Architectures	24%		
Domain 4: Design Cost-Optimized Architectures	18%		

Disclaimer: AWS Certification exams are designed to make pass/fail decisions based on the total exam score. Section level results are designed to provide direction on areas where a candidate may be weak. Candidates should exercise caution when interpreting the above section level score information as it is less reliable than the total exam score and not intended to guide future test performance.

Google Cloud

COURSE CERTIFICATE

Jul 5, 2020

Amim Knabben

has successfully completed

Serverless Machine Learning with Tensorflow on Google Cloud Platform

an online non-credit course authorized by Google Cloud and offered through Coursera

Google Cloud Training

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Verify at:
https://coursera.org/verify/XEDQ52BA6SFJ

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 11, 2020

Amim Knabben

has successfully completed

Combinatorics and Probability

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Verify at:
https://coursera.org/verify/5PFQ4A5Z6BXJ
Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Aug 6, 2020

Amim Knabben

has successfully completed

Cloud Computing Concepts: Part 2

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

Indranil Gupta
Professor
Department of Computer Science
University of Illinois at Urbana-Champaign

Verify at:
https://coursera.org/verify/TFPQQP4NRWG7

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 20, 2020

Amim Knabben

has successfully completed

Number Theory and Cryptography

an online non-credit course authorized by University of California San Diego and offered through Coursera

Alexander S. Kulikov, Visiting Professor, Department of Computer Science and Engineering;
Michael Levin, Associate Professor, Computer Science;
Vladimir Podolskii, Associate Professor, Computer Science

Verify at:
https://coursera.org/verify/G48KT6SVAZ7R

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 4, 2020

Amim Knabben

has successfully completed

Mathematical Thinking in Computer Science

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Alexander S. Kulikov, Visiting Professor, Department of Computer Science and Engineering;
Michael Levin, Associate Professor, Computer Science;
Vladimir Podolskii, Associate Professor, Computer Science

Verify at:
https://coursera.org/verify/XZCJYHVNN3UW

Coursera has confirmed the identity of this individual and their participation in the course.

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 20, 2020

Amim Knabben

has successfully completed

Introduction to Graph Theory

an online non-credit course authorized by University of California San Diego and offered through Coursera

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

Verify at:
https://coursera.org/verify/9G4XQKZXAS8A

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Aug 6, 2020

Amim Knabben

has successfully completed

Cloud Computing Applications, Part 2: Big Data and Applications in the Cloud

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Reza Farivar
Data Engineering Manager at Capital One,
Adjunct Research Assistant Professor of Computer Science
Department of Computer Science

Roy H. Campbell
Professor of Computer Science
Department of Computer Science

Verify at:
https://coursera.org/verify/F79QKKG2DPV8

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Jul 5, 2020

Amim Knabben

has successfully completed

Cloud Computing Concepts, Part 1

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

Indranil Gupta
Professor
Department of Computer Science
University of Illinois at Urbana-Champaign

Verify at:
https://coursera.org/verify/2MB96NNH3J7W

Coursera has confirmed the identity of this individual and their participation in the course.

ILLINOIS

COURSE CERTIFICATE

Aug 3, 2020

Amim Knabben

has successfully completed

Cloud Computing Applications, Part 1: Cloud Systems and Infrastructure

an online non-credit course authorized by University of Illinois Urbana-Champaign and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Roy H. Campbell
Professor of Computer Science
Department of Computer Science

Reza Farivar
Data Engineering Manager at Capital One,
Adjunct Research Assistant Professor of Computer Science
Department of Computer Science

Verify at:
https://coursera.org/verify/MSSC4K49S9FV

Coursera has confirmed the identity of this individual and their participation in the course.

5 Courses

- Mathematical Thinking in Computer Science
- Combinatorics and Probability
- Introduction to Graph Theory
- Number Theory and Cryptography
- Delivery Problem

UC San Diego

Sep 27, 2020

Amim Knabben

has successfully completed the online, non-credit Specialization

Introduction to Discrete Mathematics for Computer Science

Discrete Math is needed to see mathematical structures in the object you work with, and understand their properties. This ability is important for software engineers, data scientists, security and financial analysts (it is not a coincidence that math puzzles are often used for interviews). We cover the basic notions and results (combinatorics, graphs, probability, number theory) that are universally needed.

Alexander S. Kulikov
Professor
Department of Mathematics and Computer Science

Michael Levin
Lecturer
Computer Science

Владимир Подольский
Доцент
Факультет компьютерных наук НИУ ВШЭ

The online specialization named in this certificate may draw on material from courses taught on-campus, but the included courses are not equivalent to on-campus courses. Participation in this online specialization does not constitute enrollment at this university. This certificate does not confer a University grade, course credit or degree, and it does not verify the identity of the learner.

Verify this certificate at:
https://coursera.org/verify/specialization/S5YMUNS4H64D

VERIFIED CERTIFICATE OF COMPLETION

April 18, 2017

UDACITY

Amim Knabben

Has successfully completed the

Full Stack Web Developer Nanodegree

NANODEGREE PROGRAM

Sebastian Thrun
Founder, Udacity

Co-Created with

Amazon Web Services Github AT&T Google

UDACITY

VERIFIED CERTIFICATE OF COMPLETION

NANODEGREE PROGRAM

Data Structures & Algorithms

CERTIFICATE OF COMPLETION

Awarded to

Amim Knabben

SEBASTIAN THRUN

Founder, Udacity

June 27, 2021

Udacity has confirmed the participation of this individual in this program. Confirm program completion at confirm.udacity.com/FH7UG6FA

UC San Diego

HIGHER SCHOOL OF ECONOMICS
NATIONAL RESEARCH UNIVERSITY

COURSE CERTIFICATE

Sep 27, 2020

Amim Knabben

has successfully completed

Delivery Problem

an online non-credit course authorized by University of California San Diego and offered through Coursera

EDUCATION FOR EVERYONE · coursera · COURSE CERTIFICATE

Alexander S. Kulikov Professor Department of Mathematics and Computer Science	Владимир Подольский Доцент Факультет компьютерных наук НИУ ВШЭ

Verify at:
https://coursera.org/verify/55T5WZ3C3PL7

Coursera has confirmed the identity of this individual and their participation in the course.

Exhibit L. beneficiary’s derivatives documents

FEDERATIVE REPUBLIC OF BRAZIL

VALID THROUGHOUT THE NATIONAL TERRITORY WITHOUT ERASURES AND/OR ALTERATIONS

CIVIL REGISTRY OF NATURAL PERSONS

MARRIAGE CERTIFICATE

NAMES:

Amim Moisés Salum Knabben and **Libiane Fernandes Knabben**

REGISTRATION:

105197 01 55 2013 2 00088 291 0012122 82

FULL BIRTH NAMES, DATES AND PLACES OF BIRTH, NATIONALITY, AND FILIATION OF THE SPOUSES

Groom: Amim Moisés Salum Knabben, Brazilian, single, born in Florianópolis/Santa Catarina, on May tenth, nineteen eighty-six (05/10/1986), son of Nazareu Tancredo Knabben and Janete Salum Knabben. ----------

Bride: Libiane Fernandes, Brazilian, single, born in Taió/Santa Catarina, on December twenty-fourth, nineteen eighty-six (12/24/1986), daughter of Santino Fernandes and Londina Fernandes. ----------

DATE OF MARRIAGE REGISTRATION (IN FULL)	DAY	MONTH	YEAR
September ninth, two thousand thirteen	09	09	2013

MARITAL PROPERTY REGIME

Partial Community Property

NAME EACH SPOUSE BEGAN TO USE (IF CHANGED)

Bride's new name: Libiane Fernandes Knabben

NOTES

None.

1st Copy of the Certificate
NAME OF THE OFFICE: **CIVIL REGISTRY OFFICE OF TITLES AND DOCUMENTS AND DOCUMENTOS**
REGISTRAR: **Iolé Luz Faria**
CITY/JUDICIAL DISTRICT/STATE: **Florianópolis/SC**
ADDRESS: Rua Vidal Ramos, No. 53, Suite 106, Crystal Center Building - Centro - Phone: (48) 3223-6131
PRINTED BY: JOSIANE

The content of this certificate is true. I certify.
Florianópolis, September 9, 2013

Josiane Lourenci
Clerk

STATE OF SANTA CATARINA

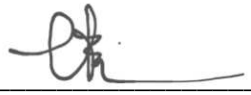
Judiciary
State of Santa Catarina
Digital Inspection Seal
Standard Seal

DFC02958-39NF
Verify the act's details at
www.tjsc.jus.br/selo

CIVIL REGISTRY OF TITLES AND DOCUMENTS AND LEGAL ENTITIES
1st SUBDISTRICT
Iolé Luz Faria
Registrar
FLORIANÓPOLIS - SC

AAA 237328

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: January 26, 2026.

REGISTRO CIVIL DAS PESSOAS NATURAIS

CERTIDÃO DE CASAMENTO

NOMES:

Amim Moisés Salum Knabben e Libiane Fernandes Knabben

MATRÍCULA:

105197 01 55 2013 2 00088 291 0012122 82

NOMES COMPLETOS DE SOLTEIRO, DATAS E LOCAIS DE NASCIMENTO, NACIONALIDADE E FILIAÇÕES DOS CÔNJUGES

Noivo: Amim Moisés Salum Knabben, brasileiro, solteiro, natural de Florianópolis/SC, nascido no dia dez de maio de mil novecentos e oitenta e seis (10/05/1986), filho de Nazareu Tancredo Knabben e Janete Salum Knabben.----------

Noiva: Libiane Fernandes, brasileira, solteira, natural de Taio/SC, nascida no dia vinte e quatro de dezembro de mil novecentos e oitenta e seis (24/12/1986), filha de Santino Fernandes e Londina Fernandes.----------

DATA DE REGISTRO DO CASAMENTO (POR EXTENSO)

	DIA	MÊS	ANO
Nove de setembro de dois mil e treze----------	09	09	2013

REGIME DE BENS DO CASAMENTO

Comunhão Parcial de Bens----------

NOME QUE CADA UM DOS CÔNJUGES PASSOU A UTILIZAR(QUANDO HOUVER ALTERAÇÃO)

Novo nome da Noiva: Libiane Fernandes Knabben ----------

OBSERVAÇÕES

Não há.----------

1ª Via da Certidão

NOME DO OFÍCIO: **OFICIO DE REG CIVIL TIT E DOCTOS**
OFICIAL REGISTRADOR: **Iolé Luz Faria**
MUNICÍPIO/COMARCA/UF: **Florianópolis/SC**
ENDEREÇO: Rua Vidal Ramos, nº 53, Sl 106 Ed. Crystal Center - Centro - Fone: (48) 3223-6131
IMPRESSO POR: JOSIANE

O conteúdo da certidão é verdadeiro. Dou Fé.
Florianópolis, 09 de setembro de 2013

Josiane Lourenci
Escrevente

Poder Judiciário
Estado de Santa Catarina
Selo Digital de Fiscalização
Selo normal
DFC02958-39NF
Confira os dados do ato em:
tjsc.jus.br/selo

REG. CIVIL TIT. DOC. E PESSOAS JURÍDICAS
1º SUB-DISTRITO
Iolé Luz Faria
Oficial
FLORIANÓPOLIS - SC

AAA 237328

FY042898

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.

Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.

This passport must be signed, except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT

TIPO / TYPE: P
PAÍS EMISSOR / ISSUING COUNTRY: BRA
PASSAPORTE Nº / PASSPORT No: FY042898

SOBRENOME / SURNAME
FERNANDES KNABBEN

NOME / GIVEN NAMES
LIBIANE

NACIONALIDADE / NATIONALITY
BRASILEIRO(A)

DATA DO NASCIMENTO / DATE OF BIRTH
24 DEZ/DEC 1988

IDENTIDADE Nº / PERSONAL No:

SEXO / SEX: F
NATURALIDADE / PLACE OF BIRTH: TAIÓ/SC

FILIAÇÃO / FILIATION
LONDINA FERNANDES

SANTINO FERNANDES

DATA DE EXPEDIÇÃO / DATE OF ISSUE
30 JAN/JAN 2019

AUTORIDADE / AUTHORITY
SR/DPF/SC

VÁLIDO ATÉ / DATE OF EXPIRY
29 JAN/JAN 2029

P<BRAFERNANDES<KNABBEN<<LIBIANE<<<<<<<<<<<<<
FY042898<6BRA8612249F2901293<<<<<<<<<<<<<<08

Assinatura do titular / Signature du titulaire
Bearer's signature / Firma del titular

CANCELADO

Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.

Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.

This passport must be signed, except where the bearer is unable to do so.

Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.

FS417024

REPÚBLICA FEDERATIVA DO BRASIL

PASSAPORTE
PASSPORT

F BRA FS417024

SOBRENOME / SURNAME
FERNADES KNABBEN

NOME / GIVEN NAMES
LIBIANE

NACIONALIDADE / NATIONALITY
BRASILEIRO(A)

DATA DO NASCIMENTO / DATE OF BIRTH
24 DEZ/DEC 1986

IDENTIDADE Nº / PERSONAL NO.

SEXO / SEX
F

NATURALIDADE / PLACE OF BIRTH
TAIÓ/SC

FILIAÇÃO / FILIATION
LONDINA FERNANDES

SANTINO FERNANDES

DATA DE EXPEDIÇÃO / DATE OF ISSUE
27 JAN/JAN 2017

AUTORIDADE / AUTHORITY
SR/DPF/SC

VALIDO ATÉ / DATE OF EXPIRY
26 JAN/JAN 2027

P<BRAFERNADES<KNABBEN<<LIBIANE<<<<<<<<<<<<<<
FS417024<7BRA8612249F2701264<<<<<<<<<<<<<<04

Menor de 12 anos de idade
Child under the age of 12
REPÚBLICA FEDERATIVA DO BRASIL
Assinatura do titular / Signature du titulaire / Bearer's signature / Firma del titular
GI081111
Este passaporte deve ser assinado pelo titular, salvo em caso de incapacidade.
Ce passeport doit être signé par le titulaire, sauf en cas d'incapacité.
This passport must be signed, except where the bearer is unable to do so.
Este pasaporte debe ser firmado por el titular, salvo en caso de incapacidad.
PASSAPORTE
PASSPORT
REPÚBLICA FEDERATIVA DO BRASIL
TIPO / TYPE
P
PAÍS EMISSOR / ISSUING COUNTRY
BRA
PASSAPORTE Nº / PASSPORT No.
GI081111
SOBRENOME / SURNAME
SALUM KNABBEN
NOME / GIVEN NAMES
ENZO
NACIONALIDADE / NATIONALITY
BRASILEIRO(A)
DATA DO NASCIMENTO / DATE OF BIRTH
23 DEZ/DEC 2014
CPF / PERSONAL NUMBER
125301009-93
SEXO / SEX
M
NATURALIDADE / PLACE OF BIRTH
FLORIANÓPOLIS/SC
FILIAÇÃO / FILIATION
AMIM MOISÉS SALUM KNABBEN
LIBIANE FERNANDES KNABBEN
O titular, enquanto menor, está autorizado pelos genitores, pelo prazo deste documento, a viajar apenas com um dos pais, indistintamente. Res. CNJ 131/11, Art. 13.
DATA DE EXPEDIÇÃO / DATE OF ISSUE
16 OUT/OCT 2023
AUTORIDADE / AUTHORITY
SR/PF/SC
VALIDO ATÉ / DATE OF EXPIRY
15 OUT/OCT 2028
P<BRASALUM<KNABBEN<<ENZO<<<<<<<<<<<<<<<<<<<<
GI081111<6BRA1412233M2810157125301009 93<<<12

ADMITTED
NYC
MAR 04 2019
H4
Aug 27, 2021
VISTOS VISAS

VISA
UNITED STATES OF AMERICA
Issuing Post Name
SAO PAULO
Control Number
20190280110012
Surname
FERNANDES KNABBEN
Given Name
LIBIANE
Visa Type /Class
R H4
Passport Number
FY042898
Sex
F
Birth Date
24DEC1986
Nationality
BRZL
Entries
M
Issue Date
08FEB2019
Expiration Date
06FEB2021
1010
Annotation
PA: AMIM MOISES SALUM KNABBEN
N8628922
**
PN-LOADSMART INC
P#-EAC1815353553
PED-27AUG2021
VNUSAFERNANDES<KNABBEN<<LIBIANE<<<<<<<<<<<<<
FY042898<6BRA8612249F2102067H4SPL306QC252269

VISTOS VISAS

APR 15 2018

VISA

UNITED STATES OF AMERICA

Issuing Post Name
SAO PAULO

Control Number
20171609640008

Surname
FERNANDES KNABBEN

Given Name
LIBIANE

Visa Type /Class
R B1/B2

Passport Number
FS417024

Sex
F

Birth Date
24DEC1986

Nationality
BRZL

Entries
M

Issue Date
12JUN2017

Expiration Date
08JUN2027

1010

Annotation

M1800967

**

VNUSAFERNANDES<KNABBEN<<LIBIANE<<<<<<<<<<<<<

FS417024<7BRA8612249F2706085B3SPL2P9LR652223

REPUBLICA FEDERATIVA DO BRASIL
VISTOS / VISAS
VISA
UNITED STATES OF AMERICA
Issuing Post Name
BRASILIA
Control Number
20240741290022
Surname
SALUM KNABBEN
Given Name
ENZO
Visa Type /Class
R B1/B2
Passport Number
GI081111
Sex
M
Birth Date
23DEC2014
Nationality
BRZL
Entries
M
Issue Date
20MAR2024
Expiration Date
13MAR2034
1001
Annotation
U7294056
**
VNUSASALUM<KNABBEN<<ENZO<<<<<<<<<<<<<<<<<<<<<
GI081111<6BRA1412233M3403130B3BRAOWHXV921421

FEDERATIVE REPUBLIC OF BRAZIL
CIVIL REGISTRY OF NATURAL PERSONS

CIVIL REGISTRY OFFICE, TITLES AND DOCUMENTS
TAIÓ - SC
//signature//
-

2nd COPY

BIRTH CERTIFICATE

NAME:
LIBIANE FERNANDES

REGISTRATION:
108332 01 55 1987 1 00028 031 0005086 57

DATE OF BIRTH (IN FULL)	DAY	MONTH	YEAR
December twenty-fourth, nineteen eighty-six	24	12	1986

TIME OF BIRTH	CITY OF BIRTH AND FEDERATION UNIT
8:00 PM	Taió - Santa Catarina

CITY OF REGISTRATION AND FEDERATION UNIT	PLACE OF BIRTH	SEX
Taió - Santa Catarina	Dona Lisette Hospital and Maternity	Female

FILIATION
SANTINO FERNANDES and LONDINA MARIA FERNANDES

GRANDPARENTS
JOÃO FERNANDES and MARIA MEROS - CONSTANTINO FERREIRA SOARES e MARIA MURBACH SOARES

DATE OF REGISTRATION (IN FULL)
January sixth, nineteen eighty-seven

NOTES/ ANNOTATIONS
This record is the same as the one under No. 5,090, issued in the original certificate.

CIVIL REGISTRY OFFICE OF NATURAL PERSONS
AND OF GUARDIANSHIPS AND WARDS, LEGAL ENTITIES
AND OF TITLES AND DOCUMENTS
Bachelor Clayton Mario Schwab
Registrar
Taió - Santa Catarina

Judiciary
State of Santa Catarina
Digital Inspection Seal
Standard

CXK71901-2JDS

Verify the act's details at
http://selo.tjsc.jus.br

REGISTRY OFFICE NAME:
Civil Registry Office of Natural Persons and of Guardianships and Wards

REGISTRAR OFFICER:
Bachelor Clayton Mario Schwab

MUNICIPALITY/JUDICIAL DISTRICT/FEDERATION UNIT:
Taió - Santa Catarina

ADDRESS:
Avenida Nereu Ramos, 45, Centro - Zip Code: 89190-000-
rctaio@gmail.com - (47) 3562-0045

Typed by: Lidia Raymondi
Fees:
1 Second-copy certificate - R$ 15.05
1 Inspection Seal paid (CXK71901-2JDS) - R$ 1.35
Total: R$ 16.40

The content of this certificate is true. I certify.
February 6, 2013, Taió - Santa Catarina

----//signature//----

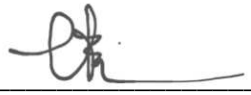
Wilse Mengarda Schwab
Deputy Registrar

Detailed Information of the Registration

Registration	0018830155 1987 1 0003 050 0000533 31
Standard	aaaaaabbcc dddd e ffff ggg hhhhhhh ii
	Detailing
aaaaa (00188-3)	National Registry Office Code (unique identification of the notary office)
bb (01)	Archive Code, being: 01 - Own Archive Other - Incorporated Archives
cc (55)	Type Of Service Provided, Being: 51: Notary Service 52: Title Protest Service 53: Real Estate Registration Service 54: Title and Document Registration Service and Civil Registration of Legal Entities 55: Civil Registration Service of Natural Persons 56: Maritime Contract Registration Service 57: Distribution Registry
dddd (1987)	Year of Registration
e (1)	Type Of Book, being: 1: Book A (Birth) 2: Book B (Marriage) 3: Book B (Religious Marriage Registration for Civil Purposes) 4: Book C (Death) 5: Auxiliary Book C (Stillbirth Registration) 6: Book D (Publication of Banns Registration) 7: Book E (Other Acts Related to Civil Registration)
ffff (0003)	Book Number
ggg (050)	Page Number
hhhhhhh (0000533)	Entry Number
ii (31)	Check Digit

For exclusive use for the issuance of certificates of registration and transcription of birth, marriage, and death

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: January 22, 2026.

REGISTRO CIVIL DAS PESSOAS NATURAIS
TAIÓ - SC

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO CIVIL DAS PESSOAS NATURAIS

2ª VIA

CERTIDÃO DE NASCIMENTO

NOME:
LIBIANE FERNANDES

MATRÍCULA:
108332 01 55 1987 1 00028 031 0005086 57

DATA DE NASCIMENTO (POR EXTENSO)
Vinte e quatro de dezembro de mil novecentos e oitenta e seis

DIA	MÊS	ANO
24	12	1986

HORA
08:00

MUNICÍPIO DE NASCIMENTO E UNIDADE DA FEDERAÇÃO
Taió - SC

MUNICÍPIO DE REGISTRO E UNIDADE DA FEDERAÇÃO
Taió - SC

LOCAL DE NASCIMENTO
Hospital e Maternidade Dona Lisette

SEXO
Feminino

FILIAÇÃO
SANTINO FERNANDES e LONDINA MARIA FERNANDES

AVÓS
JOÃO FERNANDES e MARIA MEROS - CONSTANTINO FERREIRA SOARES e MARIA MURBACH SOARES

DATA DO REGISTRO (POR EXTENSO)
Seis de janeiro de mil novecentos e oitenta e sete

OBSERVAÇÕES/AVERBAÇÕES
O presente registro é o mesmo com o de sob nº 5.090, emitido na certidão original.

OFÍCIO DE REGISTROS CIVIS DAS PESSOAS NATURAIS
E DE INTERDIÇÕES E TUTELAS, PESSOAS JURÍDICAS
E DE TÍTULOS E DOCUMENTOS
Bel. Clayton Mario Schwab
Oficial Registrador
Taió - Santa Catarina

Poder Judiciário
Estado de Santa Catarina
Selo Digital de Fiscalização
Normal
CXK71901-2JDS
Confira os dados do ato em:
http://selo.tjsc.jus.br/

NOME DO OFÍCIO:
Oficio de Registros Civis das Pessoas Naturais e de Interdições e Tutelas
OFICIAL REGISTRADOR:
Bel. Clayton Mario Schwab
MUNICÍPIO/COMARCA/UF:
Taió - SC
ENDEREÇO:
Avenida Nereu Ramos, 45, Centro - Cep: 89190-000 - rctaio@gmail.com - (47)3562-0045

O conteúdo da certidão é verdadeiro. Dou fé.
06 de fevereiro de 2013, Taió - SC

Wilse Mengarda Schwab
Oficiala Substituta

Digitado por: Lidia Raymondi
Emolumentos
1 Certidão segunda via - R$ 15,05
1 Selo de Fiscalização pago (CXK71901-2JDS) - R$ 1,35
Total: R$ 16,40

CASA DA MOEDA DO BRASIL

Detalhamento da Matrícula

Matrícula	0018830155 1987 1 0003 050 0000533 31
Padrão	aaaaaabbcc dddd e ffff ggg hhhhhhh ii
	Detalhamento
aaaaa (00188-3)	Código Nacional da Serventia (identificação única do cartório)
bb (01)	Código do Acervo, sendo: 01 - Acervo Próprio Outros - Acervos Incorporados
cc (55)	Tipo de Serviço Prestado, sendo: 51: Serviço de Notas 52: Serviço de Protesto de Títulos 53: Serviço de Registro de Imóveis 54: Serviço de Registro de Títulos e Documento Civil de pessoa jurídica 55: Serviço de Registro Civil das Pessoas Naturais 56: Serviço de Registro de Contratos Marítimos 57: Registro de Distribuição
dddd (1987)	Ano do Registro
e (1)	Tipo do livro, sendo: 1: Livro A (Nascimento) 2: Livro B (Casamento) 3: Livro B Auxiliar (Registro de casamento religioso para fins civis) 4: Livro C (Óbito) 5: Livro C Auxiliar (Registro de Natimortos) 6: Livro D (Registro de Proclamas) 7: Livro E (Demais atos relativos os Registro Civil)
ffff (0003)	Número do livro
ggg (050)	Número da folha
hhhhhhh (0000533)	Número do Termo
ii (31)	Dígito Verificador

Uso exclusivo para emissão de certidões de registro e transcrição de nascimento, casamento e óbito

4th SUBDISTRICT
REGISTRY OFFICE
TRINDADE
REGISTRAR MARIA ALICE

Notary Office: Civil Registry Office

MARIA ALICE COSTA DA SILVA - REGISTRAR

Rua Lauro Linhares, 1849, 1st Floor, Trindade
Florianópolis - State of Santa Catarina
Phone: 48 3234-0003 - ZIP Code: 88036-003 - email: contato@cartoriotrindade.com.br

BIRTH CERTIFICATE

NAME

ENZO SALUM KNABBEN

REGISTRATION:

106591 01 55 2015 1 00120 192 0032682 64

TRINDADE REGISTRY OFFICE - Maria Alice C. da Silva REGISTRAR - FLORIANÓPOLIS - ----//signature//----

Date of Birth (in full)	Day	Month	Year
DECEMBER TWENTY-THIRD, TWO THOUSAND FOURTEEN	**23**	**12**	**2014**

Time of Birth	City of Birth and Federation Unit
8:03 PM	**Florianópolis - Santa Catarina**

City of Registration and Federation Unit	Place of Birth	Sex
Florianópolis - Santa Catarina	**University Hospital**	**male**

Filiation

Amim Moisés Salum Knabben and Libiane Fernandes Knabben.

Grandparents

PATERNAL: **Nazareu Tancredo Knabben and Janete Salum Knabben;**
MATERNAL: **Santino Fernandes and Londina Fernandes.**

Twin(s)	Name and Registration Number of Twin(s)
NO	----------

Date of Registration (in full)	Live Birth Registration Number
JANUARY SIXTH, TWO THOUSAND FIFTEEN	**30-65576730-6**

Notes/Annotations

None.

Registry Office Name:
TRINDADE REGISTRY OFFICE - 4th SUBDISTRICT OF THE CAPITAL
Registrar: Maria Alice Costa da Silva
Address: Rua Lauro Linhares, 1849 - Room 108 - Trindade
ZIP Code: 88036-002
City/State: Florianópolis / Santa Catarina
First Copy of Certificate (Table V, item 3) - Inspection Seal: Exempt

The content of this certificate is true. I certify.
Florianópolis / SC, January 6, 2015

----//signature//----

Registrar

Judiciary
State of Santa Catarina
Digital Inspection Seal

EXEMPT SEAL

DAT39401-RE8V

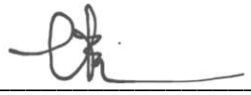
Verify the act's details at
selo.tjsc.jus.br

NOTARY 4TH SUBDISTRICT
Juliana Iracet da Silva
Sworn Clerk

75 417 972/0001-85
FLORIANÓPOLIS CIVIL REGISTRY
AND NOTARY OFFICE
Rua Lauro Linhares, 1849 - Room 108
Ernesto Pausewang Executive Center
TRINDADE - ZIP Code 88036-003
FLORIANÓPOLIS - SANTA CATARINA

BACHELOR MARIA ALICE COSTA DA SILVA
Notary and Peace Clerk
4th Subdistrict of Florianópolis – SC
Rua Lauro Linhares, 1849 - 1st Floor
Ernesto Pausewang Executive Center
Phone: (0-48) 3234-0003 - ZIP Code: 88036-003

I, Carolina Favero da Silva, telephone number 415 425-2508, mailing address P.O. Box 90487, San Diego, CA 92169, certify that the professional translation of this document from Portuguese to English has been performed by myself, a qualified translator fluent in both languages, and that the following is an accurate and complete translation of the document.


_____ Date: January 22, 2026.

SUBDISTRITO
CARTÓRIO TRINDADE
TITULAR MARIA ALICE

Tabelionato de Notas e Ofício de Registro Civil
MARIA ALICE COSTA DA SILVA – TITULAR
Rua Lauro Linhares, 1849, 1° andar, Trindade
Florianópolis – Estado de Santa Catarina
Fone 48 3234.0003 – CEP 88036-003 – e-mail: contato@cartoriotrindade.com.br

CERTIDÃO DE NASCIMENTO

NOME

ENZO SALUM KNABBEN

MATRÍCULA

106591 01 55 2015 1 00120 192 0032682 64

Data de Nascimento (por extenso)	Dia	Mês	Ano
VINTE E TRÊS DE DEZEMBRO DE DOIS MIL E QUATORZE	23	12	2014

Hora de Nascimento	Município de Nascimento e Unidade de Federação
20:03	Florianópolis - SC

Município de Registro e Unidade de Federação	Local de Nascimento	Sexo
Florianópolis - SC	Hospital Universitário	masculino

Filiação

Amim Moisés Salum Knabben e Libiane Fernandes Knabben.

Avós

PATERNOS: **Nazareu Tancredo Knabben e Janete Salum Knabben**;
MATERNOS: **Santino Fernandes e Londina Fernandes**.

Gêmeo(s)	Nome e Matrícula do(s) gêmeo(s)
NÃO	----------

Data do Registro de Nascimento (por extenso)	Nº da Declaração de Nascido Vivo
SEIS DE JANEIRO DE DOIS MIL E QUINZE	30-65576730-6

Observações/Averbações

Nenhuma.

Nome do Ofício:
CARTÓRIO TRINDADE - 4º SUBDISTRITO DA CAPITAL
Oficial Registrador: Maria Alice Costa da Silva
End.: Rua Lauro Linhares, 1849 - sala 108 - Trindade
CEP: 88036-002
Município/UF: Florianópolis / SC
1ª Via da Certidão (Tabela V, item 3) - Selo de Fiscalização: Selo Isento

O conteúdo da certidão é verdadeiro. Dou Fé.
Florianópolis / SC, 06 de janeiro de 2015

Oficial

Poder Judiciário
Estado de Santa Catarina
Selo Digital de Fiscalização
SELO ISENTO
DAT39401-RE8V
Confira os dados do ato em:
selo.tjsc.jus.br

NOTÁRIO 4º SUBDISTRITO
Juliana Iracet da Silva
Escrevente Juramentada

75 417 972/0001 - 85
FPOLIS CARTÓRIO DO REGISTRO CIVIL
E TABELIONATO
Rua: Lauro Linhares, 1849 - Sala 108
Centro Executivo Ernesto Pausewang
TRINDADE - CEP 88036 - 003
FLORIANÓPOLIS - SC

BEL. MARIA ALICE COSTA DA SILVA
Tabeliã e Escrivã de Paz
4º. Subdistrito de Florianópolis-SC
Rua Lauro Linhares, 1849 - 1º Andar
Centro Executivo Ernesto Pausewang
Fones: (0--48) 3234-0003 - CEP: 88036-003