# Joshua A. Roche

**Operations Engineer**

joshua.a.roche@gmail.com

+49-151-7306-5567

Laemmleshalde 74, 70376 Stuttgart DE

https://www.linkedin.com/in/joshua-roche-77385b61

## Professional Objectives

Citizenship: US

Federal Experience: Military

Clearance: Active Secret 20110817

Skills Summary:

*Focused and diligent DevOps professional specializing in Cloud systems and infrastructure with knowledge and experience for many different platforms and technologies. US Army Veteran with 20 years of US Military experience with Satellite Communications and Networking Systems in both Fixed and Mobile Environments. I’ve worked with many different systems in diverse network architectures and leveraged resourcefulness and ingenuity to solve complex and time sensitive problems.*

- Deployed Cloud Native Enterprise Remote Desktop solutions for millions of customers worldwide

- Provided Tier II technical support to DISA Europe and global customers for the GVS2 platform hosted on Amazon Web Services.

- Worked with deployed teams for advanced level troubleshooting on telecommunications systems delivering data, voice, and video services to supported US Army units throughout the European Theater.

- Proficient in the administration and troubleshooting of the following systems: Linkway S2, EBEM, iDirect, MPM-1000/2000, Cisco IOS, Cisco Unified Communications Manager, Palo Alto NGFW, VMware vSphere/vCenter/ESXi, MIDAS.

- Administered maintenance and repair activities for Fort Buckner STEP/Teleport facility.

- Trained and developed over 230 entry level Soldiers on Satellite Communications systems at Fort Gordon, GA.

- Provided technical direction and training on T2C2 systems and MPE PacStar systems to teams in 44th Expeditionary Signal Battalion.

- Managed strategic and tactical telecommunications links and circuits in a supervisory role as a SATCOM Shift NCOIC at Fort Buckner, Okinawa and Camp Roberts, CA.

- Deployed with the 10th Mountain Division UHN/THN to OEF VII and OIF VI, providing tactical communications support for Division HQ and Warfighters throughout the CENTCOM theater.

## Professional Experience

### Operations Engineer

1 March 2022 - Present (40hr/week)

AnyDesk Software, GmbH

Stuttgart, Germany

*Provides development and operational support to the AnyDesk remote desktop connection software backend global infrastructure and web application deployment and operation.*

- Deployed, maintained, monitored, updated, and replaired over 600 cloud servers, bare metal, and virtual systems with over 20 different cloud hosting providers including AWS, Hetzner, OVH, DataPacket, Global Secure Layer, Limestone, and Maxihost

- Installed, managed, monitored, and updated 8 PostgreSQL production database servers including replication and recovery

- Created production and staging cloud containerized applications utilizing Kubernetes and Docker

- Migrated a worldwide Icinga2 customized monitoring system to Prometheus, providing better insight into system dynamics and metrics

- Installed, monitored, and maintained Apache Tomcat, Wildfly, Quarkus, and NGINX application and web servers as well as Quarkus and FastAPI into our production environment

- Developed automation and monitoring tools for operational tasks using Ansible, Terraform, Python, Go, and BASH Scripting

- Built web applications used for Scam prevention and response and application delivery for internal testing

### Tier II AWS Systems Administrator

13 September 2021 – 1 March 2020 (40hr/week)

Superlative Technologies, Inc./JayCo Systems, GmbH

Vaihingen, Germany

*Provides Tier II user and infrastructure support on NIPR and SIPR DISA Global Video Services 2 (GVS2) platform for EUCOM and worldwide customers. Responsible for operation and maintenance of AWS Cloud Infrastructure for GVS2 systems globally and on premises site lab infrastructure, providing patching, updates, demand maintenance, change requests, and automation support for network and server components.*

Responsibilities include:

- Utilized Amazon Web Services (AWS) to build virtual machines, add storage, configure network adapters, and view performance metrics in a virtualized environment

- Knowledge of AWS CloudWatch, RDS, EFS, EC2, VDS

- Managed RHEL hosts, Apache Tomcat application servers, NGINX web servers

- Managed PKI certificates and keystores for TLS connectivity between systems and endpoints

- Automated the hardening of host systems for compliance with DISA STIG using SCAP tools and AWS System Manager components

- Tier II user support for DoD Global Video Services 2 (GVS2) platform

- Amazon Web Services cloud infrastructure operation, maintenance, and troubleshooting

- On-Premises Classified infrastructure operation, maintenance, and troubleshooting

- Provide system updates, patching, demand maintenance, change request support, and automation

- Create and update operational, technical, user documentation

### United States Army - Staff Sergeant

1 August 2001 to 1 September 2021

MOS 25S - Satellite Communications Operator/Maintainer

#### SATCOM Operations NCO

April 2019 to September 2021 (40hr/week)

Headquarters, Headquarters Company, 44th Expeditionary Signal Battalion

US Army Garrison, Rhineland-Pfalz, Smith Barracks, Baumholder, Germany

*Responsible for Tier II level support of 30 WIN-T satellite communications systems, supports Battalion Plans and Engineering section regarding Satellite Access Requests and Authorizations (SAR/SAA) and Army Service Requests and Authorizations (ASR/ASA) to the Regional SATCOM Support Center (RSSC) and Regional Cyber Center – Europe (RCC-E).*

Responsibilities include:

- Satellite/Gateway Access Request submission (SAR/GAR)

- Army Service Request submission (ASR)

- Advanced troubleshooting for 30 WIN-T Inc 1 SATCOM systems

- WIN-T Inc 1 system upgrading/updating

- New Equipment Fielding/Training (NET/NEF) Unit level preparation and integration

- Virtual Infrastructure (VMware ESXi) system administration

- Configuration Management of Voice over IP (VoIP) and Video Teleconference (VTC) systems (Cisco Unified Communications Manager)

- Unit LandWarNet eUniversity Administration / Development

- Training product and custom user documentation development for online eUniversity

- Battalion level unit Microsoft SharePoint administration

- Server Infrastructure Administration / Management

Achievements:

- Facilitated T2C2 unit level validation and training post NEF/NET for 5 systems/teams

- 5GTI system integration and troubleshooting for 30 systems

#### SATCOM Operations NCO

July 2018 to April 2019 (40hr/week)

Bravo Company, 44th Expeditionary Signal Battalion

US Army Garrison, Bavaria, Tower Barracks, Grafenwoehr, Germany

*Responsible for Tier I support of 13 WIN-T satellite communications systems for Joint Multinational Training Exercises and Continuing Operations throughout the European Theater.*

Responsibilities include:

- Unit level SATCOM reporting for 13 systems

- Troubleshooting SATCOM systems

- Managing equipment/system updates and patches for 13 systems

- Training and Professional Development of 5 Soldiers

#### Transmission Systems Team Chief

February 2018 to July 2018 (40hr/week)

Bravo Company, 44th Expeditionary Signal Battalion

US Army Garrison, Bavaria, Tower Barracks, Grafenwoehr, Germany

*Responsible for the operation and maintenance of 1 AN/TTC-59C(V3) Joint Network Node (JNN), 1 AN/TSC-167F Satellite Transportable Trailer(STT), 1 AN/TSC-156D Phoenix, and 2 AN/TSC-198A SIPR/NIPR Access Point (SNAP) systems.*

Responsibilities include:

- Training and Professional Development of 10 Soldiers

#### Instructor/Writer for 25S Advanced Individual Training

January 2015 to February 2018 (40hr/week)

Bravo Company, 551st Signal Battalion

Fort Gordon, GA

*Professional instruction of entry level US Army Soldiers for Advanced Individual Training (AIT) on the Military Occupational Specialty (MOS) 25S Satellite Communications Operator/Maintainer.*

Responsibilities include:

- Instruct 25S AIT Soldiers in the following topics:

- Basic Electronics

- Electronic Timing Systems

- Promina

- MIDAS

- Internetworking Concepts and Technologies, including:

- IPv4/IPv6 Addressing / Subnetting

- DHCP

- Routing Protocols: RIP, OSPF, EIGRP, Static

- VLAN

- GRE Tunneling

- Cisco IOS

- Frequency Modulation

- iDirect

- Radio Frequency Propagation

- MILSATCOM Administration

- Update and build instructional curriculum

Achievements:

- Instructed 230 AIT Soldiers over 3 years

- Facilitated the integration of iDirect systems into lab infrastructure and school curriculum

#### SATCOM Maintenance NCO

September 2013 to January 2015 (40hr/week)

333rd Signal Company, 78th Signal Battalion

Fort Buckner, Ginowan, Okinawa

*Responsible for the installation, operation, configuration, troubleshooting, maintenance, and repair of 2 AN/GSC-39C MILSATCOM X-band terminals and 9 additional terminals to include 2 UHF, 3 US Navy EHF, 2 C-band and 2 Ku-band terminals, at a Standardized Tactical Entry Point (STEP) and DISA Teleport facility.*

Responsibilities include:

- Prepare maintenance tasks and documents for equipment operators

- Test Measurement Diagnostic Equipment (TMDE) Administration and Maintenance

- Prepare equipment for Depot level repair

- iDirect system administration

- Viasat Linkway S2 hub system administration

- Advanced troubleshooting of SATCOM systems

- Training and Professional Development of 3 Soldiers

#### SATCOM Systems Supervisor

September 2012 to September 2013 (45hr/week)

333rd Signal Company, 78th Signal Battalion

Fort Buckner, Ginowan, Okinawa

*Responsible for the operation and maintenance of 2 AN/GSC-39C MILSATCOM X-band terminals and 9 additional terminals to include 2 UHF, 3 US Navy EHF, 2 C-band and 2 Ku-band terminals, at a Standardized Tactical Entry Point (STEP) and DISA Teleport facility.*

Responsibilities include:

- Manage SATCOM telecommunication links for US Army, Navy, Marines Corps, and Air Force units in strategic and deployed environments

- iDirect hub system operations

- Viasat Linkway S2 hub system operations

- Manage Cryptographic systems and documentation

- Training and Professional Development of 7 Soldiers

#### Information Management Officer

September 2011 to September 2012 (40hr/week)

G33 Current Operations, Eighth US Army

US Army Garrison, Yongsan, Seoul, South Korea

*Responsible for the operation of the Combined Operations and Intelligence Center (COIC) for Eighth US Army (EUSA) Special General Staff (SGS) and automations responsibilities connected to the EUSA Watch Office and Current Operations sections.*

Responsibilities include:

- Manage computer user accounts for 25 EUSA SGS personnel

- Manage tactical network access to NIPR, SIPR, CENTRIXS-K enclaves for automation systems

- Administration of Army Battle Command Systems (ABCS)

- Managed 4 KATUSA personnel

#### SATCOM Operations NCO

September 2010 to September 2011 (45hr/week)

514th Signal Company, 302d Signal Battalion

Camp Roberts, CA

*Responsible for the operation and maintenance of 1 AN/FSC-78 and 1 AN/GSC-52 earth terminals at a Standardized Tactical Entry Point (STEP) and DISA Teleport facility.*

Responsibilities include:

• Manage communication links for Army, Navy, Marines, Air Force units in strategic and deployed environments

• Manage SATCOM systems and equipment

• Manage Cryptographic systems and documentation

• Training and Professional Development of 10 Soldiers

#### Training Coordinator

September 2009 to September 2010 (40hr/week)

514th Signal Company, 302d Signal Battalion

Camp Roberts, CA

*Responsible for planning, development, resourcing, coordination, and execution of unit level training and Soldier Professional Military Education (PME) for 61 Soldiers.*

Responsibilities include:

- Plan and develop unit level training objectives and events

- Coordinate range reservation and usage

- Resource training equipment

- PME requests and requirement management

- Manage unit training schedules

- Oversee and evaluate platoon level training execution

- Professional Development of 3 Soldiers

#### Tactical Satellite Systems Team Chief

September 2005 to September 2009 (40hr/week)

Network Support Company, Division Special Troops Battalion, 10th Mountain Division

Fort Drum, NY

*Responsible for the operation and maintenance of 1 AN/TSC-169A Unit Hub Node for 10th Mountain Division HQ.*

Responsibilities include:

- Manage telecommunications links for 10th Mountain Division systems during wartime operations and training exercises

- Viasat Linkway (version 7) hub administration and operation

- Training and Professional Development of 2 Soldiers

Achievements:

- Managed a Linkway mesh network for 70 remote terminals during OIF VI

- Sent to Joint Base Lewis/McChord to prepare 34th ID for Relief in Place operations for OIF VII

#### SATCOM Team Chief

September 2002 to September 2005 (40hr/week)

229th Signal Company, 307th Signal Battalion, 1st Signal Brigade

Camp Carroll, Waegwan, South Korea

*Responsible for the operation and maintenance of 1 AN/TSC-93C terminal for training and warfighter support throughout the United States Forces Korea (USFK) theater.*

Responsibilities include:

- Manage telecommunications support for training exercises throughout the USFK theater.

- Training and Professional Development of 3 Soldiers

## References

Mr. Ezra Carr

ezra.j.carr.civ@mail.mi

Contact: Yes

Mr. Steven M. Meyer

steve.m.meyer.mil@mail.mil

Contact: YES

Mr. Mario Camilla

mario.camilla@gmail.com

Contact: Yes

## Education

Bachelor of Science in Computer Science

Graduated: December 2021

GPA: 3.25

University of Maryland, Global Campus, Adelphi, Maryland

## Certifications

- CompTIA Security+ CE (30 August 2019)

- CompTIA Cloud+ (3 October 2020)

- AWS Certified Cloud Practitioner (21 November 2020)

## Technical Skills

I have worked with the following military telecommunications systems and technologies.

Software and Technologies:

- Debian Server Administration

- Ubuntu Server 20.04 Administration

- Red Hat Enterprise Linux (RHEL)

- CentOS 7 Administration

- Amazon Web Services

- Microsoft Azure Cloud Platform

- Google Cloud Platform

- Oracle Cloud Infrastructure

- Java

- Ansible

- Terraform

- PHP

- Python

- Go Language

- Docker

- Kubernetes

- VMware ESXi 6.0

- Vmware vCenter Server (V3)

- Cisco IOS

- Cisco Unified Communications Manager version 10.5

- Palo Alto Panorama version 8

- Palo Alto PAN-OS / Panorama

- Microsoft SharePoint 2013/2016 Administration

MILSATCOM Systems:

- AN/TSC-167F STT

- AN/TTC-59C(V3) JNN

- AN/TSC1-56D Phoenix

- AN/TTC-56C(V3) SSS

- AN/TSC-154A SMART-T

- AN/TTC-64C(V3) CPN

- AN/TSC-198A SNAP

- AN/TSC-233(V1) T2C2

- AN/GSC-39C

- AN/GSC-52

- AN/FSC-78

- AN/TSC-169A UHN

- AN/TSC-93C

Other Military Communications Systems:

- AN/TYQ-167 Commercial Coalition Equipment

- Mission Partner Environment (MPE) PacStar systems (PacStar 441, 443, 451)

- Comtech DMD-2050E

- EBEM

- iDirect

- Viasat Linkway S2

- Promina

- MIDAS