# Justin Knox, CISSP

+1 (843) 534-6040 | justin.knox@posteo.de | https://linkedin.com/in/justintknox | https://github.com/jknoxdev

# SUMMARY:

- · Networking, Systems & Cyber Security Engineer with 20 years of experience in the tech industry.
- 10+ years of professional experience in automation, support and development.
- · Demonstrated leadership, problem-solving and adaptability with expertise in mentoring, training and project delivery.

#### **EXPERIENCE:**

#### IT/OT Infrastructure Administrator, Cyber Security

Sep 2023 - Present

Great Lakes Water Authority, Operational Technology, Cyber & Information Systems Security Direct-Hire | Onsite to 20% Remote | Detroit, MI

- · Piloted a credential management system, increasing department-wide password complexity by 8%.
- · Implemented TLS 1.3 authentication for an increase of authenticated sessions by over 12%.
- Designed, developed and deployed an Internet Protocol Address Management (IPAM) platform on PostgreSQL, Redis and Jenkins web-based technologies.
- · Built and tuned an internal SIEM; to provide increased visibility into network related events.
- · Developed and implemented internal malware analysis processes, categorization and archival systems.
- Designed and constructed an internal Change Management system for production related changes.
- Conducted the 2023q4 and 2024q1 internal security audits in preparation for the Quantitative Risk Assessment utilizing the AWWA, NIST 800-153 & CSF 2.0 frameworks.

Skills: PowerShell · ReST API · AD Administration · x509 · tcpdump · nc · nmap · Nessus NASL · SCADA

Systems Engineer

June 2023 - Sep 2023

Corewell Health, Critical Environment Engineering (CEE)

Contract-to-Hire | Ma-Tech Resources | Onsite to %20 Remote | Grand Rapids, MI

Collaborated with the cross-functional agile train to deploy, provision, and maintain the companies existing and future infrastructure across OSI L1-4.

• Built the production compute infrastructure within a 40% faster than estimated delivery time through providing experienced deployment methods using industry best practices.

Skills: Industrial PME · DCIM

Network Engineer March 2023 – June 2023

jPeg Design | Research & Development, Deployment, Support & Maintenance Direct-Hire | 100% Onsite | Dundee, MI

Worked in a 3-person team to design, deploy and maintain small to medium business infrastructure.

- · Developed the company's first inventory, customer, client and installation databases.
- · Developed in-house automation software, including password management and deployment monitoring software.

**Skills:** PostgreSQL · Python · Git · Azure · AWS · MoIP · Cisco CLI

# Freelance Technical Consultant

December 2021 - March 2023

Alchemy Computing, Dumptd | Research & Development, Systems Architecture

Multi-Contract | 100% Remote | Washington DC

Coordinated with Start-Up engineering teams for the prototyping of front and back-end systems in the creation, securing and deployment of company and production infrastructure.

Skills: Laravel · PHP · TomTom & Google Maps API · Ansible · VoIP · Cisco CLI · Juniper · PostgreSQL · RFID · QR-Code Programming

#### Operations Engineer II / Data Center Technician III

December 2018 - December 2021

Google | Engineering Field Services; Server, Network & Hardware Operations

Direct-Hire | 100% On-site | Charleston, SC; Reston, VA

Worked in the 12-member global EFS team covering all deployment architectures for the full-breadth of Google's production fleet.

- Provided zero loss to five-9 SLO and SLA during the ~400% increase to production load during the Covid-19 outbreak with an 80% reduction in staff.
- $\bullet \ \ \text{Led the project team which deployed the GCVE East-Coast and completed the project } 75\% \ ahead \ of \ schedule.$
- Built repairs automation software which monitored, configured and automated 80% of server diagnosis, repairs and ticket closure. Measured an 800% decrease in server repair over time for the regions in which this software was ran.
- Received 19 Peer Bonuses and 2 Challenge Coin Awards; Commendable Service during Hurricane Dorian, and same during Pandemic Support.

 $\textbf{Skills:} \ \, \textbf{Bash} \cdot \textbf{Bigtable} \cdot \textbf{Protocol Buffers} \, / \, \textbf{ProtoBuff} \cdot \textbf{Python} \cdot \textbf{Planet-Scale CI/CD} \cdot \textbf{Borg (aka Kubernetes)}$ 

# Justin Knox, CISSP | +1 (843) 534-6040 | justin.knox@posteo.de | https://linkedin.com/in/justintknox

#### **Network Operations Technician**

Switch LTD | Network Operations

Contract-to-Hire | TekSystems | 100% On-site | Las Vegas, NV

Worked in one of the largest datacenters on earth, with customers ranging from 1RU to multi-campus deployments.

 $\cdot \text{Developed automation of email using lexical analysis to automate ticket handling, saving approximately 65\% of time spent. } \\$ 

Skills: AutoHotkey · BGP · PowerShell

#### Systems Administrator IV

October 2016 - June 2017

July 2017 - December 2018

Pinnacle Community Services | Information Technology

Direct-Hire | 100% On-site | Las Vegas, NV

Worked in an in-home care facilities provider for Elderly and Autistic individuals.

- · Developed and migrated internal file-share-system to bring organization into HIPAA compliance.
- · Secured the companies trunks using IPsec over GRE on Cisco and Avaya infrastructure.
- · Conducted internal digital forensics investigations using the Sleuth toolkit.

Skills: Cisco · Windows Server 2012 · Active Directory · Samba · Porteus Linux · Java

#### Freelance Technical Consultant

April 2016 - October 2016

Alchemy Computing | Information Technology

Multi-Contract | 100% On-site | Las Vegas, NV

• Focused specialties included small to medium business PC Repair, website development, electronics prototyping.

Skills: A+ · Malware Removal · Digital Forensics · Data Recovery

#### Technical Specialist II

November 2013 – April 2015

Scientific Games | Technical Documentation and Training

Direct-Hire | 100% On-site | Las Vegas, NV

- Brought travel expenditures down by 95% through creating training videos.
- Saved 650 labor hours / week through consolidating a spreadsheet-based software tracking system into a single database.

Skills: SharePoint Arch Linux PHPFM Memcached NGINX · Apache WordPress · Jekyll · Markdown · Yammer

#### PRIOR EXPERIENCE:

British Telecom, El Segundo, CA - Network Operations Center - **Network Event Management Technician**Synetcom Digital, Torrance, CA - Research and Development - **Junior Electronics Engineer**DeVry University, Long Beach CA - **Electronics and Development Lab - Academic Tutor & Faculty Assistant** 

#### **EDUCATION:**

(IN PROGRESS) M.S.C.S. Data Science and Intelligent Systems University of Tennessee, Knoxville

(PROJECTED) December 2025 (ONLINE) Knoxville, TN

#### B.Sc. Computer Engineering Technology, Cum Laude, GPA: 3.6

DeVry University, Long Beach

March 2008 Long Beach, CA

- · Best Senior Project, 2008, "Fingertip Effects". Machine vision Java, C++ & Assembly application.
- Associated Student Body President, Spring 2005 Fall 2005, Spring 2006-Fall 2007

# CERTIFICATIONS/PUBLICATIONS/PROFESSIONAL ASSOCIATIONS:

# CISSP / Certified Information Systems Security Professional

International Information System Security Certification Consortium, ISC2, Member ID: 954626, Active as of: March 2024

#### SEC+ / Security+

Computing Technology Industry Association, CompTIA, Candidate ID: COMP001022411475, Active as of: December 2023

# ISACA Member

Information Systems Audit and Control Association, ISACA, Member ID: 2063351, Active as of: August 2024

#### Amateur Radio Technician Class License

Federal Communications Commission, FCC, Callsign: KF8BVZ, Active as of: July 2024

# **VOLUNTEER/LANGUAGES/AWARDS:**

Languages: Studying Spanish, German (Pre-A1) and Portuguese | Awards: Best Senior Project 2008.