**Justin Knox, BSc, CISSP, CISA**

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**SUMMARY**

Network & Cyber Security Engineer with 20 years of experience in the tech industry, specializing in automation, support, and development. Proven leadership, adaptability, and mentoring skills with a strong focus on cybersecurity and project delivery.

**EXPERIENCE**

**IT/OT Infrastructure Administrator, Cyber Security**  
*Great Lakes Water Authority, Operational Technology, Cyber & Information Systems Security*  
**Detroit, MI** | Onsite to 20% Remote  
September 2023 – Present

* Leveraged AWWA, NIST 800-153 & CSF 2.0 frameworks to enhance cybersecurity infrastructure.
* Piloted TLS 1.2 and x509 certificates for DNS encryption across Purdue Level 4 and DMZ systems.
* Integrated legacy IP datasets into a unified IPAM system using PostgreSQL, Redis, and Jenkins.
* Automated server lifecycle management using PowerShell and Bash.
* Developed Cisco network analysis tools and M365 Change Management tools for Active Directory.
* Improved password complexity in credential management by 8%.

**Systems Engineer**  
*Corewell Health, Critical Environment Engineering (CEE)*  
**Grand Rapids, MI** | Onsite to 20% Remote  
June 2023 – September 2023

* Built and deployed production infrastructure 40% faster than projected timelines.
* Applied industry best practices for optimized deployment methodologies.

**Network Engineer**  
*jPeg Design*  
**Dundee, MI** | 100% Onsite  
March 2023 – June 2023

* Deployed Layer 1-3 network infrastructure, security systems, and physical access controls.
* Developed in-house password management and monitoring tools using Python and Scapy on AWS/Azure.

**Freelance Technical Consultant, Startup CTO**  
*Alchemy Computing, Dumpt’d*  
**Washington DC** | 100% Remote  
December 2021 – March 2023

* Led engineering team for network infrastructure deployment and Laravel/PostgreSQL prototyping.
* Provided network engineering support for Juniper-based AMEA networks.

**Operations Engineer II / Data Center Technician III**  
*Google*  
**Charleston, SC; Reston, VA** | 100% Onsite  
December 2018 – December 2021

* Led the GCVE East-Coast deployment project, completing 75% ahead of schedule.
* Developed automation software to streamline server repairs, resulting in 800% efficiency gains.
* Awarded 19 Peer Bonuses and 2 Challenge Coins for exemplary work during Hurricane Dorian and the pandemic.

**Network Operations & Data Center Technician**  
*Switch LTD*  
**Las Vegas, NV** | 100% Onsite  
July 2017 – December 2018

* Conducted security audits and physical pen-testing for large-scale customer deployments.
* Automated ticket handling using PowerShell and AutoHotKey, reducing processing time by 65%.

**Systems Administrator IV**  
*Pinnacle Community Services*  
**Las Vegas, NV** | 100% Onsite  
October 2016 – June 2017

* Implemented HIPAA-compliant security solutions including firewalls and encrypted storage.
* Conducted digital forensics investigations in compliance with legal standards.

**Freelance Technical Consultant**  
*Alchemy Computing*  
**Las Vegas, NV** | 100% Onsite  
April 2016 – October 2016

* Provided IT services including network design, virtualization, and electronics prototyping for SMBs in legal and financial sectors.

**Technical Specialist II**  
*Bally Technologies, Scientific Games*  
**Las Vegas, NV** | 100% Onsite  
November 2013 – April 2015

* Built the company's first internal training portal, reducing travel costs by 95%.

**Freelance Technical Consultant**  
*Alchemy Computing*  
**Las Vegas, NV** | 100% Onsite  
September 2009 – November 2013

* Provided IT and network engineering services including website development and malware removal for SMBs.

**Network Event Management Technician III**  
*Infonet, British Telecom*  
**El Segundo, CA** | 100% Onsite  
May 2008 – September 2009

* Managed incident response for OSI L1-3 on MPLS & BGP, Cisco, Juniper & Alcatel-Lucent platforms.

**Junior Electronics Engineer**  
*Synetcom Digital*  
**El Segundo, CA** | 100% Onsite  
June 2006 – November 2007

* Assisted in the development of industrial SCADA radios and implemented AES-128 encrypted radio links.

**Academic Tutor, Faculty Assistant & Lab Technician**  
*DeVry University*  
**Long Beach, CA** | 100% Onsite  
March 2004 – June 2006

* Tutored students in network security and micro peripheral courses.

**EDUCATION**

**M.S.C.S. Data Science and Intelligent Systems (IN PROGRESS)**  
*University of Tennessee, Knoxville*  
Projected: December 2025

**B.Sc. Computer Engineering Technology**  
*DeVry University*  
March 2008 | Cum Laude, GPA: 3.6

* Best Senior Project 2008: "Fingertip Effects" (Machine Vision with Java, C++, Assembly).

**CERTIFICATIONS & ASSOCIATIONS**

* **CISSP | Certified Information Systems Security Professional |** International Information System Security Certification Consortium (ISC2)  
  Member ID: 954626 | Active as of: March 2024
* **CISA | Certified Information Security Auditor** | Information Systems Audit and Control Association (ISACA)

Member ID: 2063351 | Active as of: November 2024

* **Security+** | Computing Technology Industry Association (CompTIA)  
  Candidate ID: COMP001022411475 | Active as of: December 2023
* **FCC Amateur Radio Technician Class License** | Federal Communications Commission (FCC) | Callsign: KF8BVZ | Active as of: July 2024

**SKILLS**

* **Languages:** C, C++, Java, JavaScript, Shellcode, LaTeX, PowerShell, Ruby, Python, Assembly
* **Type I Hypervisors:** Hyper-V, KVM, ESXi, BSD
* **Type II Hypervisors:** Docker, VirtualBox, VMWare
* **Cloud Platforms:** AWS, Azure, GCP
* **Security Frameworks:** AWWA, NIST 800-153, CSF 2.0
* **Tools:** PostgreSQL, Redis, Jenkins, PowerShell, Bash

**PROJECTS**

**"Homelab"**

* Palo-Alto PA-500 FW, ProxMox VM environment w/ TrueNAS, PiHole DNS, OPNSense firewalls.

**"Cyboard" - Longboard Security System and Datalogger**

* Raspberry Pi smart skateboard with GPS, motion detection, and data logging using Python, SQLLite.

**VOLUNTEER WORK / LANGUAGES**

* Studying: Spanish, German (Pre-A1), Portuguese
* Awards: Best Senior Project 2008