

## CORE SKILLS

**Operating systems** – Linux (Ubuntu, Debian, Red Hat, CentOS), UNIX (FreeBSD, HP-UX, AIX, Solaris) Windows, MacOS  
**Server applications** - Apache, Nginx, HAProxy, Keepalived, OpenLDAP, BIND, Djbdns, Postfix, Sendmail, Exim, Samba, Tomcat  
**Monitoring** – Prometheus, Grafana, PagerDuty, ExtraHop, Nagios, Sensu, Munin, Monit, Cacti, Zabbix  
**Security** - Nessus, Nmap, Snort, ASA Firewalls, pfSense, IPFilter, Iptables, OpenSSL, PGP/GPG, KeyTool, x509 Certificates / PKI  
**Infrastructure (IaC)** – Ansible, Puppet, Chef, Cfengine, Netbox  
**Virtualization et al** - VMware (vSphere), KVM, oVirt, XenServer, VirtualBox, FreeBSD jails, Docker, Kubernetes, Container Registry  
**Cloud** – AWS (extensive), Google Cloud, Azure  
**Network Protocols** – IP, ARP, TCP, UDP, DNS, DHCP, LDAP, NIS, NFS, NTP, SMB, SNMP, SSH, SSL/TLS, Wireshark, tcpdump  
**Databases (DBA)** - PostgreSQL, SQLite, MongoDB, Redis, MySQL, Oracle, Microsoft SQL Server, Sybase  
**Development** - Bash, SQL, HTML, Perl, Java, Ruby, C/C++, Python, XML, Subversion, Git, Gitlab, Github, Bamboo, CI/CD

## WORK EXPERIENCE

### ExtraHop Networks

#### Sr. Systems Engineer – Infrastructure & Sustaining (2022-2024)

DevOps role managed numerous servers, services and security. Gitlab and CI/CD runners, File and web servers, Clair, Verdaccio NPM, devpi, Developer VMs, hosting infrastructure: Docker, KVM, vSphere 6,7,8, oVirt. Responsible for test and release process up to and including contract manufacturing. Heavy use of Ansible, Git, Prometheus/Grafana

#### Sr. IT Security Engineer (2014-2022)

Managed IT infrastructure, operations, security and application support, specifically Google G Suite, Cloud, Amazon AWS, Azure, Linode, Vmware ESXi and KVM platforms. Managed hundreds of Ubuntu LTS servers, desktops. Improved asset management using Netbox. Perform periodic security assessments and vulnerability scanning/remediation. Create Ansible playbooks and roles to manage configurations and deployments. Subject matter expert for DNS, LDAP and Ansible.

### EMC<sup>2</sup> Isilon (now Dell)

#### Recovery Team Lead Engineer (2011–2014)

Tier 3 support of Isilon “Scale-out NAS” storage clusters. Enterprise clients, Fortune 500, Universities, Financial and Research institutions. Recognized as Subject matter expert in NFS, Kerberos, LDAP, NIS, Samba and FreeBSD. Served 18 months as Coach for Unix Protocols team advising 30+ team members around the globe. After that joined the Remote Recovery team challenged with the most severe data loss-or-unavailable cases.

### BitPusher

#### Senior Systems Engineer (2008–2011)

Worked as consultant and service provider with primary oversight of multiple clients, mostly web startups (some YCombinator) with 1st or 2nd round funding and growth challenges (i.e. scaling), Managed their server infrastructure and operations: network, systems, security, database and web application stacks (LAMP, Ruby on Rails etc), virtualization, monitoring, performance and scaling. Heavy use of monitoring tools (Nagios, Cacti, Munin, Zabbix, NRPE, SNMP Rrdtool), LDAP and DNS. Security assessments & PCI compliance, Multiple datacenter migrations. Clients included: WuFoo (acquired by Survey Monkey 2011), Offbeat Creations (acquired by Playdom then Disney in 2010), Serious Business (acquired by Zynga 2010), Electronic Arts (EA), Sendgrid, Mesmo (GSN), Soompi, Dropsend

### Port of Seattle

#### Senior Linux Server Engineer (2004-2008)

Managed 75+ Linux and HP-UX servers, Redesigned the Port's DNS architecture - migrating to BIND9 on Linux co-existing with Active Directory. Played a key role in designing and implementing large-scale virtualization effort using VMware VI3, ESX server, Platespin P2V and backup solutions. Developed, documented and nurtured system standardization and infrastructure management tools (CFengine, Nagios, CVS, Yum and RHN). Improved system & network security leveraging Nessus, nmap, Snort+ACID (NIDS), Iptables, tcp\_wrappers. Security scanning and vulnerability assessments. Establish patching procedures and cycle. Actively participated in change management and security team meetings. Collaborated with Windows server engineering, networking, security and systems development groups to determine/implement solutions. Lead role as WebSphere administrator.

### VeriSign (was eNIC)

#### System Engineer (2000-2004)

*VeriSign Naming and Directory Services, formerly know as VeriSign Global Registry Services acquired eNIC in 2001.*

As primary system engineer for .CC, .TV and various other CCTLDs (country code top-level-domains), I managed nearly 100 FreeBSD and Linux servers, IPFilter, IPTables, Netscreen and Sidewinder firewalls, Cisco and Alteon load-balancers/routers, network security, assorted MySQL and Oracle databases, ccTLDroot-listed DNS nameservers running BIND. I also performed programming and system architecture (design) by working with other team members designing applications which used: DNS(BIND), Email & Web Forwarding, Apache+mod\_ssl, mod\_perl, FastCGI, Java, Tomcat, Struts, LDAP (OpenLDAP), MySQL and Oracle.

**Altrec.com**  
Lead Engineer (1998-2000)

**Medius Interactive**  
Webmaster, Developer (1995-1998)

**Boeing**  
Technical Illustrator / CAD (1992-1995)

## EDUCATION & TRAINING

AWS Cloud Practitioner (2024)

CompTIA Advanced Security Practitioner (CASP+) (2019)  
Computer security

Digital Forensics (2012)  
Computer and mobile device forensics, evidence handling

Sentinel DHS Training (2007)  
Cybersecurity – Incident Handling and Response

Computer Forensics Course (2006)  
Fundamentals

CISSP Certification (2004-2010)  
Certified Information Systems Security Professional CISSP #57439

MCSE Certification (1999)  
Exams: NT Server, Windows 98, TCP/IP Networking, SQL Server 6.5 Admin.

AA Degree (1998)  
Courses: Calculus, Physics, C programming, Philosophy, Desktop Publishing.

Certified Technical Illustrator / Drafter (1992)  
Courses: Engineering Drafting / Technical Illustration.

## AFFILIATIONS/OTHER

- Greater Seattle Linux Users Group (GSLUG) – co-leader
- Founder and board member of Free Geek Seattle
- Seattle BSD Users (SeaBUG)
- Seattle Area System Administrator's Guild (SASAG)
- Linux Fest Northwest (LFNW) – 3x presenter and attendee
- FreeBSD Ports Maintainer since 2004
- Talks/Presentations: Ansible, DNS on Linux, Puppet, pfSense, Packaging (RPM/DEB), Xca, Exim, Nmap & Nessus