

## CORE SKILLS

**Operating systems** – Linux (Red Hat, CentOS, Debian, Ubuntu), UNIX (FreeBSD, HP-UX, AIX, Solaris) Windows, Mac OS X

**Server applications** - BIND, Apache, Nginx, HAProxy, Keepalived, OpenLDAP, Postfix, Sendmail, Exim, Samba, Tomcat

**Development** - Perl, Java, HTML, Bash, SQL, Ruby, C/C++, Python, XML, CVS, Subversion, Git, Bugzilla, Jira, RT, Redmine

**Monitoring & Infrastructure** – Puppet, Chef, CFEngine, Nagios, Munin, Monit, Cacti, Zabbix

**Security** - Nmap, Nessus, Snort, Firewalls, pfSense, IPFilter, Iptables, OpenSSL, PGP/GPG, KeyTool, x509 Certificates

**Databases (DBA)** - MySQL, PostgreSQL, SQLite, MongoDB, Redis, Oracle, Microsoft SQL Server, Sybase

**Virtualization** - VMware (ESX, Server & Workstation), KVM, XenServer, qemu, Ganeti, VirtualBox, FreeBSD jails

**Network Protocols** - ARP, TCP/IP, UDP, DNS, DHCP, LDAP, NIS, NFS, NTP, SMB, SNMP, SSH, SSL/TLS, Wireshark, tcpdump

## WORK EXPERIENCE

**EMC<sup>2</sup> Isilon**                                      **Recovery Team Lead Engineer**                                      **2011 – Present in Seattle, Washington**

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 in Seattle, Washington**

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 in Seattle, Washington**

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. Key player in Websphere upgrade from 5.0 to 6.1.

**VeriSign**    **System Engineer**    **2000 - 2004 in Seattle, Washington**

*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, cTLDroot-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.

**Altrex.com**    **Lead Engineer**    **1998 - 2000 in Kirkland, Washington**

*Altrex.com began as Joppa in Seattle, then as Life Outside. The Altrex.com website launched in March 1999 with the belief that spending time outside, whether climbing a mountain or taking a quiet hike, helps us to live a healthy, balanced life.*  
Developed and launched the full-scale e-commerce web site (altrex.com) with a team of 4 programmers. Determined appropriate site architecture - using Apache web server and Java on Linux and SQL Server database. Built and maintained development and deployment systems. Network/system administration, including migration from peer-to-peer to client-server (domain) topology. Deployed multiple servers including Exchange Server 5.5, DHCP, DNS, HTTP, Proxy, FTP, Samba and routers with packet filter and NAT. Managed team of five.

**Medius Interactive**    **Webmaster, Developer**    **1995 - 1998 in Seattle, Washington**

Webmaster, developer and primary system administrator for the web sites of the New York Yankees, Atlanta Braves and Seattle Mariners, among others. Web development (CGI) using Perl, Java, Javascript, HTML and mSQL/MySQL. Created uForum software. System administration on SGI, Linux and Sun platforms. Web server installation and configuration (NCSA, Apache, Netscape, IIS). Database administration.

**Boeing**    **Technical Illustrator and CAD Drafter**    **1992 - 1995 in Washington**

Produced technical illustrations for components maintenance manuals. Scanned printed drawings and converted to vector (digital) format. Beta tested Catia v4 rollout. Used BOGART illustration system, CATIA, Flythru and board drafting.

## EDUCATION & TRAINING

### 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 active board member of Free Geek Seattle
- Seattle BSD Users (SeaBUG) – co-leader
- Seattle Area System Administrator's Guild (SASAG) – active member
- Linux Fest Northwest (LFNW) – 3x presenter and attendee
- FreeBSD Ports Maintainer since 2004
- Talks/Presentations: DNS on Linux, Puppet, pfSense, Packaging (RPM/DEB), Xca, Exim, Nmap & Nessus
- Books I've read: <http://www.goodreads.com/user/show/896814-mark>
- Find out more! <http://mark.foster.cc/> and LinkedIn: <http://www.linkedin.com/in/fostermarkd>