

Professional Summary:

- **20+ years** of experience in IT across many industries including retail, manufacturing, telecommunications, and insurance in **UNIX/Linux engineering and software development roles**. Experienced in **installation, configuration, design, and deployment** of **Open SuSE, Red Hat, RHEL, Debian, AIX, and Solaris**. **Software Development** experience includes **C, C++, Perl, Python**, with various workflows utilizing **GIT, SVN, CVS**, and **build systems** such as **GNU Autotools** and tools to generate native **RPM, deb, and installp** packages.
- Expertise in automating standard (and not so standard) Operating System and hardware maintenance tasks and building tools in **Shell, Perl, Python**, that can be utilized to effect deployment across geographically distributed environments.
- Experience with creating and utilizing **CFEngine recipies** and **Puppet manifests** to automate many system administration and software deployment tasks.
- Proficient in **(Distributed) Version Control Systems** such as **GIT, SVN (subversion), CVS, and Hg (mercurial)** and merging updates from other engineers/developers into the HEAD to create releases.
- Experience with designing and maintaining **bare metal installation services** such as **PXE, FAI (fully automated install), preseed, jumpstart, and NIM**.
- Proficient in design, implementation, and administration of typical infrastructure services such as **DNS, DHCP, Backup/Recovery, and email**.
- Understanding of **Web Services** and configuration and installation of **Apache and Nginx** and **LAMP** stacks.
- Understanding of various **virtualization** technologies such as **KVM, VMWare, and containers**
- Experience writing **PAM** modules and clients and enable applications to take advantage of existing user authentication and authorization.
- Proficient with **Software Development Life Cycles SDLC**.

Technical Skills:

Operating Systems Red Hat/RHEL 6.x, 7.x, AIX 5.3, 7.1, Open SuSE, Debian, CentOS, Solaris 6, 7, 8, 9

Programming Languages Shell, Bash, Ksh, Perl, Python, C/C++, SQL, sed, awk, common lisp, clojure, emacs-lisp, Flex, Bison

Build Systems and Packages GNU Autotools, Make, RPM, DEB, Installp

Networking TCP/IP, DNS, DHCP, NFS, FTP, SMTP, SSH

Virtualization kvm, VMWare Workstation, VMWare ESX, VirtualBox, Solaris zones, Linux containers

Databases sqlite, DB/2, sybase, Oracle

Web Servers Apache, Nginx, Squid

Professional Experience:

Lowe's Companies, Mooresville, NC

February 2011 – Present

Unix/Linux Infrastructure Engineer

- Technical lead on project evaluation and recommending migration path from **AIX** to **GNU/Linux** considering **RedHat/RHEL, Ubuntu** or **CentOS** with virtualization provided by **KVM** or **VMWare**.
- Developed automated method of creating **installp** and **RPM** packages utilizing **autotools, git**. **Perl** is the primary programming language. Looking at incorporating process into **SDLC** and **CI** systems.
- Developed automated process to flash firmware/microcode in **IBM BladeCenter Chassis** and **Power 7 blades**. **Perl** is the primary language with **C** and **Python** utilities to manage deployment across entire chain.
- Developed automated process to upgrade and patch **AIX** servers. **Ksh** is the primary language.
- Developed **PAM** module to enable in house applications to hook into existing authentication infrastructure. This was written in **C**.

- Deployed **CFengine** to each **AIX** server in chain.
- Worked with Release Management team members to optimize release processes.
- Worked with Application Development team to formalize SDLC process.
- Designed procedures and processes to ensure servers remain PCI compliant and known security vulnerabilities are patched in a timely manner.

CSC, Blythewood, SC

June 2009 - February 2011

Unix System Engineer

- Performed **Solaris** installs – Physical servers and Zones
- Participated in successful disaster recovery test at remote sites
- Configured file systems on Hitachi SANS – Veritas, UFS, and ZFS
- Configured multipathing utilizing Veritas DMP and Hitachi Dynamic Link Manager
- Assisted backup team with NetBackup installations and trouble shooting

Consultant, Bishopville, SC

June 2005 – June 2009

Provided UNIX and GNU/Linux support to various clients as required.

- **Information Research LLC, Palo Alto, CA**
 - Provided Debian GNU/Linux technical support, remote administration, server configuration and advice
- **Barnes Enterprises, Florence, SC**
 - Implemented VPN between company locations utilizing Debian GNU/Linux servers, OpenVPN, and Shorewall
 - Implemented automated installation and management procedures for Microsoft Windows XP

Horry Telephone Cooperative, Conway, SC

July 1999 – June 2005

Network / Systems Administrator

- Automated server install and patch process utilizing custom shell scripts, **CFengine**, **puppet**, **JumpStart**, and **InstantIgnition**
- Implemented server monitoring solution utilizing **Nagios**
- Architected and implemented Unix server backup solution utilizing Legato
- Deployed **Tru64**, **Solaris**, **OpenVMS** and Windows NT Server to Compaq HSG80 SAN
- Developed interface between HTC Sybase customer order system and BellSouth's provisioning system utilizing C
- Architected and implemented email system for ISP, utilizing Exim, ClamAV, Courier-imap/pop3, MySQL, SpamAssassin and others

Education:

- **Bachelor of Science in Physics** Francis Marion University, Florence, SC