

This can be considered an appendix to my resume. It should be noted that I have never worked on any primarily Windows-based project. I have spent my entire career in Unix and Linux. That said, if your philosophy is, "Hire for the talent, train for the skill," know that I'm a quick study!

Networking

Technologies

- 4G LTE, 5G NSA, live and virtual MME, PGW, SGW, HSS, PCRF
- General protocols: TCP, IP, UDP, ARP, RARP, DNS, DHCP, HTTP, FTP, SMTP, SNMP
- 4G LTE, 5G protocols: SCTP, S1AP, GTP, GTPv2
- Lacking: 3G, 5G SA, IoT

Hardware

- Nokia Flexi Zone, Airscale, and 9412 eNodeBs/gNodeBs
- Nokia 7750, 7705 SAR-H routers
- Netgear consumer and business-grade switches
- Vaunix Lab Brick variable RF attenuators
- Lacking: Cisco, Brocade, Ubiquiti

Software

- Keysight EXata network modeling and simulation
- Wireshark, tcpdump network analysis
- Nokia NFM-P, NEM network management
- Lacking: OPNET Modeler

Build and Release Engineering

Software Configuration Management

- Standards-compliant SCM planning:
- Participation on change control review boards
- Policy enforcement through ClearCase triggers and UCM
- Lacking: Windows-only projects

DevOps, CI/CD

- Automation of software builds and regression testing using Jenkins or locally-developed scripts
- Optimization of builds and allocation of build-farm resources
- Managing cross-compilation to widely diverse target hardware
- Builds of compiler toolchains, including triple-builds of compilers themselves
- Build tools: GCC, G++, make, GNU make, AT&T nmake, CMake, ninja
- Lacking: Ant, Maven

Version Control

- ClearCase: Deployment administrator, data center administrator, and end user, on projects ranging from one site with three VOBs and 50 users to thirteen sites across four companies with several hundred VOBs and several thousand users
- Git, Github, Gitlab, Bitbucket, Perforce, Mercurial
- The classics: SCCS, CVS, SVN
- Lacking: Other top-tier SCM tool sets.

Bug Tracking

- ClearQuest, Jira, Bugzilla

Software Development

Programming languages

- General: C, C++, Go, Rust
- Scripting: Python, Go, bash and Korn shells, Perl
- Lacking: Java, Ruby, Swift, Objective-C

Web

- Content: HTML, CSS, Javascript, PHP
- Frameworks: Dojo
- Servers: Apache, nginx, Python xxx

- Lacking: jQuery

IDEs

- Eclipse, VS Code, Emacs

Data

- Serialization: JSON, YAML, CSV, TSV
- Databases: PostgreSQL, MySQL, SQLite, flat files
- Lacking: Oracle, DB2, UML

Systems Administration

Data Center Physical

- Multi-level physical access, mechanical and electronic locks
- Audio and RF shielding, sight-line blockage
- Location management: grid location in data center, 19" rack space numbers, etc.
- Power management and distribution: 120/240VAC single phase, -48VDC, +24VDC
- Battery backup power up to 50KWh: APC, Liebert
- Environment sensors and auxiliary HVAC: Vertiv
- Cable management: Raised floors, overhead cable trays, patch panels
- Lacking: 480VAC 3-phase, external generators

Data Center Services

- Server administration: HPE iLO, Supermicro IPMI, hardware and software RAID, LTO tape
- VMware: ESXi, vCenter, Fusion, Workstation
- File sharing: NFS, CIFS, SMB, NetApp, Synology NAS, TrueNAS
- User administration: NIS, YP
- Local email: Sendmail, qmail
- Trouble ticketing: RT
- Network monitoring: Nagios, Big Brother
- Lacking: AD, LDAP

Hardware/Operating Systems

- HP PA-RISC, HP-UX
- Sun SPARC, Solaris
- Intel/AMD x86: Windows, Linux, FreeBSD
- ARM: Raspberry Pi Zero, 4b, 5: Raspberry Pi OS
- Linux: Ubuntu, Red Hat, Fedora, Arch, Linux Mint, Debian
- Lacking: AIX, Windows in the large

Documentation

- Subject matter: User guides and tutorials,
- Document preparation: Microsoft Word, LibreOffice Write, FrameMaker, troff, tbl, -man macros, HTML, MD, Acrobat, Emacs, Vim, Notepad++
- Illustration: Photoshop, Illustrator, Inkscape, GIMP, Paint3D
- Lacking: LaTeX, Documentum, DocBook