**Alex J. Avriette** 

320 23<sup>rd</sup> St. South #1404 Arlington, Virginia, 22202 avriette@gmail.com 703 350 4637 [H]

# **Unix Systems Engineer**

**Executive Summary:** 

I'm a second-generation Unix Systems Administrator and Systems Programmer. I've been working in dot-com, biotech, and defense for about a decade now, alternating between the two positions, and sometimes straddling both. My experience with both (programming and systems administration) is extensive, from both small businesses to very large businesses and defense. My knowledge of Information Security / Assurance / Forensics is also acute. I'm midcareer, looking to embark upon new challenges. I like Solaris, and I am good with Linux.

Relevant Experience 1998 – 2004 (for further history, contact me)

2004 – present Primary Global Research, Inc. Market Analyst Palo Alto, California

For PGR, I provide market analysis for hedge funds and other investment firms. I am required to give detailed analysis of many technology companies' products (Sun, RedHat, Novell, and others). This information is used by these firms to plan investment.

2004 – present Engate Systems Engineer California

Engate is currently bringing to market an anti-spam network appliance with new methodology (17 patents). I am responsible for systems installation, system maintenance (RedHat Linux), troubleshooting, and some programming.

I am also involved in the process to develop an automated testing regimen for new product releases, and regression tests. This is largely based upon the Perl Testing Framework.

2003 – 2005 America Online, Inc Systems Programmer Reston, Virginia At America Online, I was responsible for designing, deploying, and administrating very large scale (tens of millions to billions of transactions per day) databases.

Additionally, I designed APIs for proprietary data storage/warehousing and metric monitoring systems in Perl / PL/SQL

I was required to be on call 24/7 for diagnosis of system failures (or impending failures).

AOL's environment is a very large (10e5+ nodes) heterogeneous (OSF1 / HP-UX / Solaris / RHEL) network. My group was responsible for maintaining configuration, user permissions, systems administration, and fix-break issues.

Additionally, I worked in a tools group, providing general software development in Perl and Shell (csh/ksh/bash), SQL, C, and many other languages, as well as documentation and training for same.

### 2003 – 2003 BAE Systems North America Systems Administrator (Consultant) Arlington, Virginia

My responsibilities at BAE included creating security policies and mapping out paths for the hardware and software environments on a long-term software project for the Defense Logistics Agency.

I was also responsible for maintenance and troubleshooting on a legacy application (ca 1990), which is written in 7 different languages (Perl, csh, sh, C/C++, Scheme, Java, and TCL). It is presently being phased out, but requires administrative and end-user support.

Security was the primary focus, and we deployed our application to the DOD SIPRNET. Strong familiarity with DOD/DISA Unix STIG.

Required to author white papers for management staff, recommending hardware and software purchases, and also direct the group from an infrastructure perspective.

I was also tasked with creating tools in perl to help diagnose problems with the system and its software, as well as install software related to the development process.

I was the resident expert on the JOPES (Joint Operation Planning and Execution System) and GCCS (Global Command and Control System) systems and interfaces.

We deployed to Sun Solaris on UltraSPARC and Red Hat Linux on Dell x86.

2001 – 2003
The American Chemical Society
Systems Programmer / Administrator (Consultant)
Washington, District of Columbia

Employed as a UNIX developer and administrator. Tasked with the administration, design, and implementation of one of the largest PostgreSQL database installations on Earth (multi-terabyte scale). The database environment is a Sun Enterprise Cluster and SAN, as well as a smaller "cloud" of Linux servers.

Tasks included formulating stored procedures for the database, UNIX Shell scripts (tcsh/ksh), perl programming, process automation, UNIX administration (NFS, users, etc). As well as configuration and installation of new servers and creating end-user Web Interfaces.

The project contains some 200 tools, written in Java, Shell, Perl, and C, spread over some 20 different servers (Solaris/Linux/Windows).

We are serving up over 750,000 articles from various ACS publications, exceeding 4 Million TIFF images.

Tasked with investigating a new product or environment for possible deployment in our Journal Delivery Environment to reduce load or increase availability.

Team Lead role.

2000 – 2001 marinalife.com Linux Developer / Administrator (Consultant) Baltimore, Maryland

My position at marinalife was that of a Senior UNIX administrator. Because of marinalife's relative youth, My duties included a wide variety of tasks, such as serverside perl development, network design and implementation, creation and management of subnets, RAID configuration, and system-wide software installs.

Because marinalife is a web-commerce company, my environment included the care and feeding of a pair of IBM DB2 databases, Allaire (now Macromedia) ColdFusion, and Apache, among other things.

1998 – 1999 CW Ventures Network / Systems Engineer (Consultant) Cardiff-by-the-Sea, California Created dialup networking (Macintosh), installed and configured small business software packages, two intranets, workstations, and productivity devices. Also worked personally with a senior associate in creating a remote network with ISDN connectivity to the office.

1998 – 1998 AxyS Pharmaceuticals Systems Support & Administration (Consultant) La Jolla, California

Networking support. Macintosh-Unix network troubleshooting. Backups (DLT/CD). Some moderate perl programming (diagnosing network failures). User workstation installation (Macintosh, Sparc — sun4m) and configuration. Software upgrades. Some helpdesk support.

Thank you for your time and consideration, I look forward to the opportunity to work together to create quality systems and software.

# **Cheat Sheet: Skills**

#### **Operating Systems**

SunOS / Solaris: 2.4 - 5.9 "Solaris 9"

Linux:

RHEL 3.0, 4.0 AS/ES/WS

Fedora Core 1, 2

Yellow Dog Linux (PPC)

Linux From Scratch

Debian (Sparc)

MacOS: Everything from 1984 through to the present Jaguar and Tiger. Member

of ADC and beta tester.

IRIX: 5.2 - 6.5.18f

BSD: OpenBSD, NetBSD, FreeBSD, Darwin.

#### **Programming Languages**

Perl: Expert. 1998 – Present. Zealot. Asynchronous (POE), DBI, CGI, lots and lots of network programming experience. I speak (sometimes literally) many protocols, including SMTP, IMAP, POP, and others.

Shell: Expert. 1998 – Present. Csh. Bash. Zsh (preferred). Ksh (preferred). Tcsh. Zealot.

C: Fluent, but rusty. 1996 (College, 2 years) to present. Mostly a passing familiarity due to my relationship with UNIX.

Ruby: Intermediate. 2001 - Present.

SQL: Intermediate. More of an administrative than strictly development role.

2000 - Present. Focus on PostgreSQL.

#### **Hardware**

SPARC: You name it, I've done it. sun4m, sun4u, sun4c, sun4d (really). Exx00, installation, troubleshooting, teardown, etc. Remote administration (serial). SAN. SunCluster (2, 3). Zealot.

X86: Yeah. Lots of experience with VA-Linux offerings. Mostly rackmount and not desktop stuff. Remote administration (serial).

Mac: Mac 128/512 up through XServe and XServe RAID. 680x0, 60x, 75x, 74xx... SGI: Challenge/PowerChallenge, PowerSeries, Onyx, Octane, O2, Origin, VGX, VGXT, RE, RE2.

## Languages

English (native, fluent)
Mandarin Chinese (conversational)

#### **Internet and other Affiliations**

I am a frequent contributor to the Wikipedia and to the CPAN.