SCOTT BEARDSLEY (916) 538-3663 sc0ttbeardsley@gmail.com

SUMMARY:

A self-motivated, curious, and thorough Systems Engineer and Programmer. Experienced in large scale website maintenance, High Performance Computing (HPC), automation, troubleshooting, web application development, architecture engineering, and configuration management. Seeking a Service/Production/Site Reliability Engineering position in a dynamic environment with a positive culture.

WORK EXPERIENCE:

Sr. Service Engineer, Yahoo! July 2010 - Present

Ultimately responsible for all aspects of Web Search Frontend including stability, scalability/performance, capacity, security, revenue, launches, compliance, and platforms. Held a role critical for the success of numerous cross-team and cross-partner efforts including algo, ads, speller, and unified gateway Microsoft transitions, three major middleware migrations, numerous datacenter decomissions and turnups, and the new Reference Architecture for Yahoo! Search products. Responsible for training other Engineers, defining team standards, and troubleshooting/resolving mission-critical production issues.

HPCC Administrator/Programmer, UC Davis April 2006 - July 2010

Gathered requirements, designed applications and database schemas, implemented web and command line interfaces, and generated supporting documentation for the existing and new campus-wide HPC infrastructure. Installed, maintained, and secured numerous Unix-based clusters in a diverse networking environment. Identified future needs and developed cost-effective solutions that optimize staff time. Assisted the Information Architect in developing the architecture of data analysis systems and their subsequent deployment and operation for major research projects. This position required minimal supervision, specialized knowledge of application development, HPC computing, database design, Unix-based OS internals, and played a key role in the success of HPC at UC Davis.

Systems Administrator, Innotas (fka Project Arena) April 2004 - June 2006

Solely responsible for many Sun Enterprise, Linux, and Windows servers in a 24x7 multi-site environment. Re-designed, implemented, and maintained company-wide infrastructures including Development, QA, UAT, and Production environments. Supported many open source and commercial packages. Migrated the flagship product from iPlanet Web servers on Solaris for Sparc to clustered Apache (HTTPd web and Tomcat application) servers on Suse Linux for AMD64.

Teacher's Assistant, Operating System Pragmatics (CSUS Dept. of CSc/CpE) Spring 2004 and Fall 2005

After being invited back as a Teacher's Assistant, I provided guidance to Computer Science and Computer Engineering students in the Spring 2004 and Fall 2005 Semesters of Operating System Pragmatics. In this course students design a multitasking microkernel and utilities complete with virtual memory, IPC, a pseudo filesystem, interrupt handling, device drivers, and a user shell.

Systems Administrator, E*Trade Financial July 2000 - September 2002

First point of contact in a 24x7 datacenter. Responsible for troubleshooting, monitoring, and administering 200+ enterprise, production servers running Solaris, Linux, and VAX/VMS. Wrote ksh, bash, and Perl scripts to automate common tasks.

EDUCATION:

Bachelor of Science, Computer Science: California State University, Sacramento

Completion: December 2003
GPA: 3.3/3.7 (Overall/Major Specific)
Related Courses:

Programming Methodology I & II	File Organization	Algorithm Analysis
Computing Theory	Software Engineering	Computer Organization
Networks and Internets	Unix Systems Administration	Programming Languages
OO Graphics Programming	Modeling/Experimental Design	Operating Systems I & II

RELATED SKILLS:

While at Yahoo! I made great strides in improving the release processes of numerous products through education, collaboration, standardization, and repeatability. I was the team's driving force which pushed search to use internal tools which provide configuration management, automation, uniform security policy enforcement, and to follow company standards when defined. I primarily supported monolithic PHP-based web applications on top of Apache HTTP server and fronted by Yahoo Traffic Server and Akamai DSA, smaller LAMP-based properties, and another that made extensive use of MySQL for caching and an internal indexing platform for searching.

While at UC Davis I supported many HPC-related technologies including OpenMPI, OpenMP, ipcs, and various commercial and OS compilers. In an effort to promote repeatability, I used Rocks, kickstart, puppet, and cobbler extensively to automate and control changes to our environment. I developed a research "cloud" using libvirt, KVM, and PKI. I supported the full stack of software for many research clusters; from InfiniPath device drivers to Sun Grid Engine batch queue. I often optimize and debug custom Fortran and C codes. I was responsible for the security of these resources and prevented major breaches.

PROJECTS:

UC Davis Tier 3: Designed and implemented the LCG Tier 3 for UC Davis High Energy Physics researchers. This project required a large stack of Open Science Grid (OSG) software and a thorough understanding of HPC, networking, and I/O. At the time UC Davis was one of the largest Tier 3 sites in the LHC CMS project.

CDR (Checksums Done Right): Co-developed an operating system security product similar to Tripwirethat uses vendor-supplied checksums to validate an OS installation. CDR is written in Python, uses MySQL as a backend and supports RPM and DEB packages.

VOS (Vectra Operating System): Developed a custom micro-kernel for an Intel-based system. Implemented IPC's, device drivers, filesystem, and paging. Worked in a two-member team and developed in C on an HP/UX host.