SCOTT BEARDSLEY +1 (916) 213-2002 sc0ttbeardsley@gmail.com

SUMMARY:

A self-motivated, curious, and thorough Systems Engineer and Programmer. Experienced in High Performance Computing (HPC), automation, scripting, troubleshooting, web application development, software engineering, architecture engineering, and configuration management. Seeking a dynamic/complex environment where such skills and experience will be of use.

WORK EXPERIENCE:

Systems Administrator/Programmer, University of California, Davis June 2006 - present

Gather requirements, design applications and database schemas, implement web and command line interfaces, and generate supporting documentation for the existing and new campus-wide HPC infrastructure. Install, maintain, and secure numerous Unix-based clusters in a diverse networking environment. Identify future needs and develop cost-effective solutions that optimize staff time. Assist the Information Architect in developing the architecture of data analysis systems and their subsequent deployment and operation for major research projects. This position works under general supervision, has specialized knowledge of application development, HPC computing, database design, Unix-based OS internals, and plays a key role in the success of HPC at UC Davis. This position requires staff supervisory skills.

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

Solely responsible for all enterprise servers in a 24x7 multi-site environment. Re-designed, implemented, and maintained company-wide infrastructures including Development, QA, UAT, and Production environments. The following packages were heavily used in production: Apache, Tomcat, BIND, NET-SNMP, Sun iPlanet (Web, Application, Message Queue).

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

First point of contact in a 24x7 datacenter. Responsible for troubleshooting, monitoring, and administering all 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 UC Davis I've supported many HPC-related technologies including OpenMPI, OpenMP, ipcs, and various commercial and OS compilers. In an effort to promote repeatability, I've 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've 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 am responsible for the security of these resources and thankfully have prevented any major breaches.

PROJECTS:

UC Davis Tier3: Designed and implemented the LCG Tier3 for UC Davis High Energy Physics

researchers. This project requires a large stack of Open Science Grid (OSG) software and a thorough understanding of HPC, networking, and I/O. UC Davis is one of the largest tier3 sites in the US CMS project.

Checksums Done Right: Co-developed an operating system security product similar to Tripwire that uses vendor-supplied checksums to validate an OS installation. This project is currently in progress. CDR is written in Python, uses MySQL as a backend and currently 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.

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