James E. (Jed) Donnelley

2835 Benvenue Avenue, Berkeley, CA 94705 510.207.5713 jed-resume@webstart.com

Computer Scientist, Software Engineer, Systems Administrator

Many years experience in commercial, government, and academic settings listening carefully, working with teams, and translating loose system requirements into working and easy to maintain systems with automated builds, configuration management, and system monitoring. Strong team building, teaching, presentation and writing skills. I've been a programmer throughout my career and find that I'm most happy if I'm doing at least some programming.

Hardware: Dell, IBM, Supermicro, Cray, EMC, NetApp, Cisco, others Systems: Linux (Redhat, Oracle, CentOS, Ubuntu), FreeBSD, Solaris, AIX, Windows, others Software: Perl/Ruby, Java/C, Nagios, AWS/VMWare Esxi/Cisco UCSD, Docker, DNS/Named, Dhcp, Cobbler, PXE/kickstart, Apache/LAMP, Ansible/Puppet, git/perforce/svn, others

Professional Experience:

Guidewire Software Sept 2015-Present

DevOps Software Engineer focused on build automation and configuration management. Much of my work during this time has focused on moving a DevOps environment based largely on bare metal systems to a new datacenter where all systems run as VMs under Cisco's UCS Director. I've also been a significant player in improving monitoring with technologies such as Nagios, New Relic, monit, and Sensu. A considerable portion of my work still focuses in the performance testing area, especially insuring consistent performance tests in an environment that moved from bare metal to VMs and includes numerous large shared storage systems.

Taos Mountain contractor to Guidewire Software

Aug 2014-Sept 2015

Linux Sysadmin supporting 400+ servers (perhaps 25% VMs from VMWare and OpenStack) in a DevOps environment that emphasizes large databases. Managing about 1/2 petabyte of SAN storage from NetApp, EMC, Supermicro, and Dell RAID being accessed by mostly Dell servers and blade chassis from Dell, IBM and Supermicro. This work emphasized support for performance testing, focusing on configuration management for build automation. Initial work automated Oracle RAC installs using open source configuration management software along with custom build code that I wrote.

MyPoints division of United Online Senior Linux and Network Administrator

Sep 2008-May 2014

Gradually took over administration for some 500 Redhat Linux servers (perhaps 10% Esxi VMWare) in two colo centers (one on each coast), featuring MySQL and Hadoop clusters,

and numerous Linux workstations. Automated system builds and configuration management. Especially adept at communicating with team members for requirements and then at programming in those requirements for process automation. Wrote a configuration management system (~10k lines open sourced) that allowed MyPoints to reduce their system administrators gradually from 3 to 1. Worked their Nagios monitoring to reduce their on-call critical alerts from 4-5/week to 1-2/month.

UC Lawrence Berkeley National Laboratory, NERSC Computer Scientist

Dec 1997-July2008

Managed the transition of the NERSC servers from Solaris to Linux. Managed Web, LDAP, DB (Oracle), Nagios, CFEngine, and many other services. Worked on a team to evaluate and purchase a \$30M scientific computer system.

UC Lawrence Livermore National Laboratory Computer Scientist

June 1995-Dec 1997

Research and development of parallel I/O software and protocols (MPI/IO), Web/DB Apache/Oracle development for classified engineering records. DOD SCI clearance.

University of Stuttgart Computer Center, Stuttgart, Germany Computer Scientist

April 1994-April 1995

Research on Internet multicast and Web protocols, early international Internet TCP/IP performance analysis work, conference presentations

UC Lawrence Livermore National Laboratory Computer Scientist

Sep 1972-April 1994

Operating system security and networking research, lead development of a network operating system. DOE Q clearance. Software development and systems administration leader for a \$1B+ scientific computer center. Computer systems and network research, group and project leading.

Numerous consulting and teaching roles for Aerospace Corp., Dieterich Glasrund and Jones, EDP Audit Control, American Supercomputer, University of Calgary, Rockwell International, Defense Airborne Reconnaissance Office, and Raytheon.

Education:

University of California, Davis: MS Mathematics, BA Physics, BS Mathematics Department award for outstanding achievement in undergraduate mathematics

Numerous peer reviewed publications: http://www.webstart.com/jed/Publications.html including:

Mark S. Miller (Google Research), James E. Donnelley, and Alan H. Karp (Hewlett Packard), <u>Delegating Responsibility in Digital Systems: Horton's "Who Done It?"</u>: (http://www.erights.org/elib/capability/horton/), presented at the 2nd USENIX Workshop on Hot Topics in Security (Hotsec '07), Boston, August 6, 2007.

Presentations: Numerous conference, teaching and tutorial presentations