

Senior UNIX/Linux Systems Administrator

Employment

Service Engineer
Yahoo! Inc.

Sunnyvale, CA
2009-Present

- Provide operational and systems engineering support for web applications
- Work with developers and QA engineers to design, test, deploy, document, monitor and maintain applications and components
- Maintain distributed systems, software configurations, releases, debugging, troubleshooting, and monitoring
- Generate and analyze metrics for site performance and availability

Senior UNIX Systems Administrator (consultant)
Taos Mountain, Inc.

Danger/Microsoft, Palo Alto, CA
2008-2009

- Redeploy, build support infrastructure, and assist with redesign of corporate datacenter
- Redesign and rebuild automated management and provisioning systems for production and preproduction data centers
- Troubleshoot and repair network, application, OS, and hardware issues in support of developers and engineers

Linux Systems Administrator
Google

Mountain View, CA
2006-2008

- Dogfood Team - troubleshoot and repair network, system, and application problems to provide internal support for Google products to Google employees
- Liaison with corporate sysops and production engineering teams to escalate application engineering issues and submit code changes
- Author tools for Gmail data access and manipulation by system administrators

Systems Administrator
GrammaTech, Inc.

Ithaca, New York
2004-2006

- Consult with contractors and architects on construction designs and specifications including HVAC, power, data cabling, and equipment support structures
- Specify, purchase, and deploy distributed iSCSI/Fibre SAN across multiple buildings
- Repair improper configurations in existing systems: SMTP, IMAP, DNS, WIFI, NIS, NFS, etc.
- Upgrade network security to modern standards, e.g., replace telnet with ssh, IMAP with IMAPS, add WPA for wireless access
- Redesign network to improve performance, increase security, and implement secure WIFI and VPN
- Design, build, and install new servers to redistribute loads, improve security, and increase capacity for current needs and projected growth
- Build, install, write software for new backup server to implement disk-to-disk-to-tape system to replace inadequate systems utilizing multiple hosts

Systems Administrator
Cornell University Dept. of BSCB

Ithaca, New York
2001 - 2004

- Manage all computing activities in a modest-sized active and diverse academic department with an international user base
- Maintain departmental network, servers, and workstations including Linux, BSD, Solaris, and Windows 95/NT/2000/XP
- Design, build, and maintain production network RAID storage system
- Design, build, and maintain MPI, PVM, and Beowulf supercomputing clusters
- Work with CIT to develop innovative firewall prototype for deployment at multiple sites across campus; incorporating filtering, NAT, routing, WIFI, and IDS functions on a single OpenBSD, CDROM-based system
- Provide network resources: WIFI, WWW, SSH, Remote X, VNC, SMTP, POP, IMAP, NTP, DHCP, IRC, RTSP, Firewalls, IDS/Network/System monitors, Backup, Database, File, and Print services

- Design and build workstation cloning systems for Linux and NT platforms
- Present basic and advanced Unix training sessions for faculty, staff, and students
- Overhaul web site: design graphics, convert to dynamic content with templating, construct CMS to provide update by students, faculty and staff without webmaster intervention
- Author data-driven departmental web-based applications
- Assisted in application of parallel processing techniques to problems in global optimization using interval arithmetic

Information Systems Administrator
Cornell University Facilities Management

Ithaca, New York
1995 - 2001

- Established a new position and unit to administer computing resources for all departments
- Provide desktop support for over 100 Mac and Windows NT/2000 workstations across entire campus
- Maintain up to 10 Windows NT, 2000, Linux, and BSD Unix servers for 6 large departments across several geographic locations
- Operated several of the first Linux servers and workstations on campus
- Converted all workstations from Macintosh to Windows platform
- Administer approximately 200 user accounts for Windows NT domain
- Work with other network administrators to establish several cooperative NT domains within the division
- Build departmental web-based applications

Technical Consultant
Cornell University Grounds Department

Ithaca, New York
1994 - 1995

- Assist with special projects for the Grounds Department
- Computerize Grounds Department annual snow removal plan
- Revised all office procedures to streamline and consolidate information resources

Information Systems Manager
LifeNET, Inc.

Ithaca, New York
1999 - Present

- Engineer and maintain network and small Linux, Unix server cluster
- Author, deploy, and maintain internet-based applications
- Assist clients with maintenance of their hosted network services

Professional Skills

- Fluent in most popular programming, scripting, and markup languages: python, perl, C, etc., conversant in many others
- Intimate knowledge of advanced features and system internals of major operating systems: Solaris, Linux, BSD, Windows, MacOS
- Some experience with AIX, HP-UX, IOS, others
- Author of several applications included in the Familiar Linux distribution for PDA's
- Author of many free and shareware programs, utilities, and libraries, in use worldwide
- Extensive experience in network, OS, and application security testing, tool construction, and design of custom protection architectures
- Extensive experience in infrastructure management tools, and datacenter automation
- Almost no intrusions, compromises or virus infections on any supported systems or networks for the past fifteen years
- Consistently achieve 99.999% uptime for supported systems

Community Activities

Computer, Network, and Electronics Consultant
Ithaca Community Radio

Ithaca, New York
2002 - Present

- Design, construct, author software, maintain network for computer interface to control remote FM transmitter audio via secure wireless link of several miles
- Interface remote audio equipment to radio station via telephone lines for live productions

Computer and Network Consultant
Child Abuse Prevention Network

Ithaca, New York
1998 - Present

- Develop custom web applications and internet-based tools for several international organizations
- Maintain network infrastructure and servers for several internet domains - DNS, WWW, Mail, FTP, Chat, Forums, etc.
- Technical advisor for global research database project
- Interface cross-country satellite downlink to multimedia stream for live and archival web access of National conference
- Develop interactive training program for professionals in the field of child abuse prevention and maintain infrastructure to provide ongoing training - system in continuous operation for over ten years