

Andrew M. Gaffney  
Santa Clara, CA 95054  
(636) 357-1548  
andrew@agaffney.org

## OBJECTIVE

A full-time position that utilizes my knowledge and experience and provides me with varied and challenging responsibilities.

## SKILLS

**Operating Systems:** Linux (Slackware, Gentoo, Ubuntu, Debian, RedHat Enterprise, and CentOS), Windows (3.x/9x/ME/NT/2000/XP/2003), DOS, Mac OS (8/9/10)

**Programming Languages:** Perl, C/C++/Visual C++, Java, BASIC/Visual Basic, Python, PHP, bash shell scripting

### Software and services:

Network services: DHCP and DNS (BIND and dnsmasq), SMTP (postfix and qmail) and IMAP/POP3 (courier and dovecot), HTTP (apache w/ mod\_php, mod\_perl, mod\_ssl, lighttpd, squid, nginx), memcache, NFS, CIFS, iSCSI, LDAP (AD and OpenLDAP) and Radius (Freeradius), SNMP, CVS, SVN, git (administration and general usage)

Monitoring: nagios, cacti, and Zabbix

Server management: central configuration management with puppet, central authentication using pam\_ldap with Active Directory and OpenLDAP

Cluster: Hadoop and HBase

**Networking:** 10/100/1000 ethernet switching, Wifi (802.11a/b/g/n), VLANs (802.1q), VPN (IPsec, PPTP, OpenVPN)

**Databases:** MySQL with a focus on master-slave and multi-master replication models

**Virtualization/Emulation:** Xen, KVM, VMware server/workstation, VirtualBox, Wine

**Web development:** HTML 4.01, XHTML 1.0, CSS, Javascript (jQuery), PHP frameworks (CakePHP and Zend)

## EXPERIENCE

**Senior System Administrator**, Announce Media (May 2010 to present)

- Primary responsibility is general system administration with a focus on MySQL Database administration
- Implemented puppet to manage all of our existing servers and automate the build/configuration of new servers. All server types were fully defined in puppet, so that a newly built server could be up and ready for production within 30 minutes of OS installation
- Implemented LDAP authentication against an existing Active Directory setup
- Implemented an automatic sync between AD and OpenLDAP and transitioned to OpenLDAP for auth
- Manage MySQL replication topology, backup, and administration
- Created an automatic LDAP to MySQL password synchronization process
- Implemented nagios and integrated with puppet for automatic monitoring of servers known to puppet
- Built and maintain multiple Hadoop clusters configured for MapReduce and HBase

**Support Engineer II**, Announce Media (August 2009 to May 2010)

- Tracked down and fixed bugs discovered in production code
- Perform on-call duties, which involves responding to alerts from the monitoring system and resolving the issue

**Release Engineering Lead**, Gentoo Linux (March 2008 to present)

- Coordinated the building of Gentoo release media, including stage tarballs, minimal CDs, and Live CD/DVDs
- Implemented the autobuild system (a fresh set of install media for multiple architectures is automatically built, signed, and uploaded to the mirrors on a weekly basis)

**Developer**, Gentoo Linux (November 2004 to March 2008)

- Developed the Gentoo Linux Installer
- Created numerous enhancements and bug fixes for Gentoo's catalyst and genkernel tools
- Developed the Quickstart utility for doing automated Gentoo installations on multiple architectures (x86, x86\_64, hppa, and sparc)

**Senior Linux System Administrator**, Broadstripe (December 2008 to August 2009)

- General system administration on CentOS, Debian, and Ubuntu servers
- Implemented puppet for configuration management
- Implemented AD authentication for centralized authentication and access control
- Created DNS cluster for ISP customers and hosting of company-owned domains
- Eliminated wasteful server usage by consolidating functionality and using virtualization
- Setup nagios and cacti in order to monitor servers and services
- Used perl, python, and shell scripting to automate various system administration tasks
- Maintained an existing Active Directory setup, including performing multiple failed server recoveries and massive cleanup of existing infrastructure
- Designed, implemented, tested, and debugged customer-facing websites with transactional abilities and scripts to process data

**Senior System and Network Administrator**, Creative Communications (February 2005 to October 2008)

- Designed, implemented, tested, and debugged web-based applications for product ordering/payment, internal inventory management (purchase orders, invoicing, etc.), and internal accounting
- Responsible for Linux server administration including hardware setup, OS installation, server setup/configuration, firewall/router/gateway design/implementation, software upgrades, security updates, and user management

**Linux Administrator**, Primary Care Computing, LLC (January 2004 to January 2005)

- Responsible for troubleshooting and repairing hardware, network, and software/operating system related problems for x86-based machines running DOS, Windows, and Linux
- General Linux server administration including hardware setup, OS installation, server setup/configuration, firewall/router/gateway design/implementation, software upgrades, security updates, and user management
- Designed web-based database-driven applications

**Senior Systems Administrator**, Skyline Aeronautics, LLC (October 2001 to August 2005)

- Responsible for server administration including hardware setup, OS installation, server setup/configuration, firewall/network design/implementation including DHCP and DNS (bind and dnsmasq), software upgrades, and security updates
- Implemented an e-mail system consisting of SMTP (qmail), POP3, IMAP, and web-based mail for employees
- Designed, built, and maintained a web portal for customers to schedule aircraft and instructors for

flight training

- Designed and implemented a Windows NT style domain utilizing Samba 3.0 to take advantage of centralized network logons, roaming profiles, and policies for the publicly accessible computers
- Responsible for troubleshooting hardware, software, and network problems