



# Jesse Adelman

## Senior Linux/UNIX Systems Administrator

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### Objective

To find fun, interesting, enriching engagements as a Senior Linux/UNIX Systems Administrator

### General Overview/Special Skills

- Strong proponent of Open Source technologies on commodity hardware to improve and strengthen computing and network infrastructures, where appropriate and cost-effective, saving organizations hundreds of thousands of dollars in straight like-for-like solution comparisons
- Over fifteen years of continuous Systems Administration career experience
- Adept at deploying and maintaining mid-sized multi-site networks (up to 100+ servers), using broad knowledge of software packaging and deployment technologies, configuration file version control, configuration management strategies, network device configuration tracking, strong maintenance and updating policies, disaster mitigation strategies
- Accomplished at working well with others, and a proven leadership track record - flexible, honest and reliable
- Assist selected non-profit organizations with technical needs on a volunteer and reduced-rate basis
- Adept at translating dense technical topics to English in both written, one-on-one and briefing formats
- Able to quickly learn new technologies and strategies
- Confident trainer, providing engaging and informative training classes for both end-users and technical users
- Have very well developed reference skills and a well-populated personal technology reference library
- Certified [LPI Advanced Linux System Administrator Level 2](#), a distribution-agnostic certification.
- Can make a damn fine cappuccino!

### Technology Experience Highlights

- \*NIX Operating Systems: GNU/Linux (Red Hat, SuSE, Debian, Ubuntu, Gentoo), Solaris (2.6-2.9), HP-UX (9.X-10.X), Mac OS X (10.1-10.5.X), exposure to FreeBSD (4.9 & 5.2)
- Well-versed on TCP/IP networking, packet sniffers, network security, NETGEAR managed switches, Cisco equipment (PIX Firewalls, Cisco VPN Concentrators, ArrowPoint load balancers and 3600-series routers, 4000-series Ethernet switches), Ethernet, Wireless Networking
- \*NIX Network Applications: Apache (1.3.X, 2.2.X), ProFTPD, vsftpd, BIND (8.2.X, 9.X.X), Syslog-NG (including remote logging), Nagios, Nessus, Tripwire, Postfix, SSH (using shell, SFTP, SCP, port forwarding, and SOCKS proxy), Arpwatch, Rsync, Bash and Perl scripting, IRCd, and many more
- Web Applications: Webmin, Drupal CMP, Plone CMF, MediaWiki, Zope Application Server, WebCalendar, The Gallery, SquirrelMail, Cacti, and many others
- Proprietary Desktop Technologies: Windows 2000/XP/7, TCP/IP & Microsoft networking, Microsoft Active Directory, Microsoft Group Policy Objects, Windows Deployment Services, Microsoft Systems Management Server, general PC and Macintosh hardware and software troubleshooting, configuring and networking
- Proprietary Application Servers/Client Applications: MS Exchange & Outlook, Photoshop, MS Office, Visio and many others

**Career Centered Experience****Bold and Busted, LLC, aka ilikelinux Consulting****Senior Systems Shepherd****May '10-present**

My very own consultancy, providing all manner of IT help to non-profits, and Senior Linux Systems Administration assistance and advice to everyone else. Most prominent clients: Giant Rabbit, LLC (see below), and [RACO Manufacturing, Inc. of Emeryville](#).

**Ripple, Inc. Senior Technical Operations Engineer****June '15-February '16**

Finally getting deep into Chef and Ruby here. :) Taking my wide experience and helping to create better Infrastructure via code and architecture. Enjoyed the Ripple Boba Tea scene for a hot minute, nearly lost myself in horrid Boba Tea addiction. Saved them a bunch of fiat money by decommissioning lots of orphaned servers and services. Mentored sharp Desktop IT Admin on Operations concepts and career (thanks to the master SysAdmin Tom Limoncelli and crew's books).

**Hello.com Productivity and Systems Engineer****August '14-May '15**

Stealthy von Stealthenstien social startup in SF and Palo Alto! Yay! Started in Rocktember! :) Learned Chef (still a noob, but getting better, love Ruby!), using Test Kitchen + Vagrant, migrated to GitHub Private Repo, in-depth 3rd-party development and productivity tool evaluations, Linux SysAdmin/DevOps process introductions, advising development team on infrastructure impacts. Transformed in-house build scripts to Travis-CI.com YAML for both mobile client (iOS) builds and backend server builds (Java w/ Ant, yeah, I know, meh). Moved production onto RightScale, which included moving to Percona MySQL Server, database replication farm, large storage arrays with GlusterFS, and all on Google Compute Engine. Oversaw deployment of New Relic OS Agent on all servers and on Java/Tomcat application agent and on Mobile iOS client. (New Relic captures EVERY crash!) Negotiated costs with vendors. LOTS of automation. Got the Palo Alto office fresh fruit delivered weekly from farmfresh toyou.com, boyeeeee! Demonstrated the high value of standing desks + proper supporting floormats to hackers with nascent bad backs. Fun! :)

**Collab.Net, Inc.****Senior Linux Systems Engineer****August '11-August '14**

Oversee legacy site "Codesion.com" aka "CVSDude" transition after acquisition, to become "cloudforge.com". Handled a large amount of technical debt, paid some of it down, and helped to plan out how to pay the remainder. Tuned mysql, stopping database issues cold. Unrusted my RedHat skills, though I wish them rusted again. Unfroze package upgrade process, which had been frozen in place by fear for over a year. 48 Real servers and 5 "cloud" virtualized servers at SoftLayer, in multiple datacenters. Learned Puppet, though did it the hard way with a legacy installation.

**Giant Rabbit, LLC, Berkeley, CA (via my company Bold and Busted, LLC)****Systems Architect/Systems Administrator/Computer Duster****April '09-September '11**

For a IT consulting company dedicated to supporting non-profits with size-appropriate technology, work with over a dozen Bay Area non-profit clients (and one international client) to put out fires, architect solid solutions, and provide excellent documentation and personable service. Prominent clients included [Youth Employment Partnership of Oakland, Inc.](#), [ACCESS Women's Health Justice](#), and over a dozen others on an as-needed basis.

**Kiva Microfunds, Inc., San Francisco, CA*****Systems Administrator/IT Manager*****March '08-October '08***For a prominent non-profit micro-finance lending web site, supported and improved internal and production systems.*

- Built out and migrated to new web and database server architecture, based on CentOS 5.1, Apache 2.2, Zend PHP and MySQL 5, from previous single-host legacy host on CentOS 4.4
- Implemented load-balancing across web hosts
- Implemented MySQL replication, MAATKIT MySQL tools
- Implemented Nagios, NagiosQL, Cacti and custom Cacti HTTP transaction latency scripts and graphs
- Tuned Apache, PHP and MySQL, based on load, informed by benchmarks and organizational goals
- Implemented log file summarizers pflogsumm and logwatch, improving visibility into production system health for development team
- Documented system build out recipes and architecture overviews
- Implemented the use of Subversion for configuration file change control
- Created code deployment scripts
- Initiated alternative co-location vendor communications
- Identified administration and performance problems with locked-down virtualized guest hosts and lack of visibility into system performance metrics
- For office network, implemented Windows Active Directory roaming profiles and JungleDisk corporate backups to Amazon S3, as well as switching virus scanning to Kaspersky AntiVirus for all Microsoft Windows systems

**Weather Underground, Inc., San Francisco, CA*****Systems Administrator*****September '07-March '08***For one of the oldest weather sites on the Web, support existing systems and network devices, assist software developers and assist the Director of Technology in maintaining three data centers.*

- Cleaned main data center of old hardware, including rack-mount servers and network equipment; arranged pickup and reuse by local 501(c)(3) charity ([OTX-WEST](#)), which I selected.
- Supported PXELINUX diskless systems (loosely based on Slackware 9.1).
- Implemented NTPd (with multicast updates) across diskless hosts.
- Created more streamlined and tuned diskless-oriented Linux Kernel builds.
- Streamlined BIND configuration files for ease of updates and standardized shared options, and implemented master/slave BIND servers with NOTIFY updates to slaves and to ISP DNS servers.
- Assisted with BIOS reconfigurations to fix boot up problems, and tuning for PCI Express.
- Upgraded internal MediaWiki instance to latest version.
- Documented previously under-documented systems.
- Handled system and application outages.
- Assisted with planned data center power outage.
- Proposed and implemented home-grown Highly Available NFS filer with RAID5 providing 5.4 TB usable storage, using Gentoo Linux, Heartbeat, DRBD, and Areca 1220 RAID controller cards with RAID battery backup unit, on two servers with virtual IP failover. Provided benchmarks, determining better hardware RAID controller models and facilitating kernel tuning.
- Improved communications from Operations to the development and application teams.
- Fixed a variety of problems with NFS, recommended standard client mount options.
- Advised senior staff on system performance and administration process improvements.
- Upgraded Awstats, and rewrote automated log processing Bash shell scripts, using "Trampoline"-style looping constructs to maximize usage of all CPU cores, while minimizing impact on server resources. Initiated use of non-memory intensive and non-disk intensive web server log aggregation tools. Log processing time cut by a two-thirds, and solved inconsistent data representation.
- Coordinated vendor on-site maintenance and upgrades.
- Server upgrades and service migrations (Slackware 9.1 to 12.0), including Sendmail, milter, and Apache, and internal user directories.
- Assisted developers with proper system utility usage, and developer virtual machine development OS instances.
- Racked, cabled and configured servers, and performed general hardware upgrades.

**Jumpcut.com (née Yahoo, Inc.), San Francisco, CA****Systems and Network Engineer****July '06-April '07***For a "Web 2.0" video editing, sharing, and community startup, supported systems and network devices, and assisted software development.*

- Production applications supported include Apache 2.0.X, PHP 5.X, MySQL 5.X, all running under Gentoo Linux
- Performed testing and configuration optimization
- Polished Cacti and Nagios implementations, implemented teMySQL templates, and created a custom script, data sources and templates for HTTP latency graphing
- Implemented new Apache SSL hosts
- Implemented OpenVPN LAN-to-LAN VPN between office and co-location facility
- Created "chroot jails" for various production applications, using the [Jail shell](#), sudo, and a bit of shell scripting, with an aim to make safer calls from production applications to external applications
- Implemented SQLGrey for managed Postfix Grey-listing
- Added secondary backup "store-and-forward" Postfix MTA with SQLGrey integration
- Worked with CTO on development of applications, including creating development environments using VMWare, WINE and Xorg X11 drivers
- Implemented OpenWrt (<http://www.openwrt.org/>) on office router
- Managed corporate desktop systems migration to Yahoo's infrastructure
- Configured Yahoo's custom Apache and PHP, and deployed site code to Yahoo! production systems as a part of Yahoo's acquisition of Jumpcut
- Wiki'd documentation of systems and project planning

**Verizon Business (née Totality, Inc), San Francisco, CA****Senior Systems Engineer****December '05-July '06 (consultant via Taos Mountain, Inc.)***Supported Verizon Business Managed Service Provider clients, such as the Gap, Best Buy, American Airlines, and many others, in a Service Level Agreement model:*

- Improved production procedures documentation and process
- Supported business-critical Solaris, Red Hat Linux, HP-UX, AIX, and Windows systems and applications. "Unrusted" proprietary UNIX skillset
- Suggested, and helped pilot, Plone/Zope CMS for replacement of aging CVS-updated AFT/HTML documentation system. Worked with Perl programmer to create automated site scraping for deployment of read-only version of Plone site, using Bash, cron and wget
- Resolved client issues alongside database administrators and network engineers
- Trained new systems engineers
- Consistently high marks from management

**Riverbed, Inc, San Francisco, CA****Systems Administration Consultant****March '05-June '05 (Independent Consultant)***Advised on and implemented the following services:*

- Assisted the Systems Administrator in closing a backlog of requests
- Implemented a spam flagging system using Postfix and DSPAM
- Upgraded internally-facing wiki (TWiki) to latest stable version
- Implemented a VPN solution with OpenVPN, and added to the OpenVPN codebase
- Documented progress and systems with Bugzilla and TWiki

**Genentech, Inc., South San Francisco, CA**  
**Senior Systems Administrator/Software Deployment Engineer (Consultant)**  
**July '03-June '04 (part-time/full-time mix)**

*Contracted by former full-time supervisor:*

- Packaged and deployed difficult multi-layered software to over 1200 Windows workstations, in a validated, controlled and FDA-regulated environment
- Wrote Perl scripts to automate local configuration changes and systems administration on Windows workstations
- Prototyped and assisted in the evaluation of Gentoo Linux/Zope Content Management Frameworks development and staging servers
- Managed Linux development server relocation to data center

**Center for Reproductive Health Research & Policy, University of California, San Francisco**  
**Systems Administrator (Independent Consultant)**  
**October '02-November '03 (project driven)**

*Contracted to provide the following services for PhD-level researchers and staff:*

- Proposed and implemented web-based full-featured shared calendaring system
  - Reduced costs by re-purposing older hardware
  - Used Red Hat GNU/Linux 7.3., stripped down to HTTP, HTTPS, NTP and SSH network services, with Big Brother 1.9c for monitoring
  - Installed and configured [Web Calendar](#)
  - Used iptables to restrict access and usage to two subnets
- Prototyped web-based survey system [Mod Survey](#)
- Created role-based shared folders with Windows 2000/XP "Offline Files" functionality
- Security assessments, using a variety of tools, including Nessus, nmap and Ettercap
- User Training (very high marks!)

**Denalii, Inc. (defunct), Burlingame, CA****Senior Systems Engineer (Full-time)****March '01-March '02***Responsible for the following systems and services for heterogeneous Production network:*

- Network Applications: BIND 8, ProFTPD, Apache, NTP, OpenSSH/SFTP
- Web Application Platform: Oracle 8, Orion Application Server, Apache, PHP 4, Sawmill web log analyzer
- System Monitoring: Big Brother, Syslog (centralized)
- Hardware: Sun/Intel
- Operating Systems: Solaris 8, Red Hat Linux 6.2 & 7.1
- Network devices: Cisco (3600 Routers, 4006 Smart Switches, ArrowPoint load balancers), Netscreen 100 firewalls

*Supervised the following projects:*

- Rolled out NTP to all hosts, syncing to both internal servers and external time servers
- Rolled out Big Brother, for host monitoring, role-based paging, and uptime tracking
- Migrated HTML content from Roxen to Apache
- “In-sourced” corporate web site, DNS, and network administration (phased out SiteSmith)
- Performed and managed technical aspects of closing engineering-centered office
- Maintained production Perl environment, including module maintenance, configuration and updates (DBI, DBD::Oracle, MD5, etc.)
- Deployed applications onto Orion J2EE Application Server (1.5.2), resolved Windows-to-UNIX migration issues
- Quickly and thoroughly undid sloppy administration practices of previous Systems Administrator, including correcting bad kernel build from unstable kernel tree, remaking DNS structure and updating many applications for security and bugfixes
- Implemented security policies, including password aging and auditing, regular Nessus scanning, regular network packet sniffing using snoop (Solaris), tcpdump (Linux), Ethereal for capture and analysis (Linux & Windows), and nmap (both external and internal network service scanning)
- Kept documentation up to date. Worked closely with Senior Oracle DBA to both maintain and improve current Oracle administration on Solaris, rolled-out Oracle on Linux, and also trained her on more advanced Systems Administration tasks to act as my backup, and she trained me on more advanced Oracle administration techniques

Special Note: Helped guide developers on architecture of logging and alerting systems to integrate with existing Open Source tools, made use of Open Source solutions for all appropriate areas, kept costs to a minimum, created generally stronger and more closely held policies and procedures for administration and maintenance of production systems.

**Zing Networks, Inc. (defunct), San Francisco, CA**  
**Director of Network Operations (Production Network & Systems) (Full-time, promotion)**  
**July '00-December '00**

*Responsible for the following systems and services:*

- Network Applications: Apache, Squid (HTTP accelerator mode), Sendmail, BoldFish (mass e-mailing server), OpenSSH
- Web Application Platform: Apache, Squid, mod\_perl, Mason, Oracle
- Monitoring/Reporting: Aria Web Tracking, Big Brother, MRTG, PIXlog, LogWatch, swatch
- Hardware: Mostly Intel, with Sun for Oracle (E4500 primary, E3500 standby)
- Storage: EMC Symmetrix drive arrays and Celerra File Server, with 3 TB usable storage, Legato Networker with SpectraLogic Bullfrog AIT-1 tape jukebox
- Operating Systems: RedHat Linux 6.2, Solaris 7
- Network devices: Cisco PIX firewalls, Foundry Networks (ServerIron (Layer 7 switch), NetIron (Layer 3 switch), 3Com BayStack 350 (Layer 3 switch), point-to-point T1
- Vendor Relationships: Exodus, VALinux, Sun, SiteSmith, Redapt, GlobalCenter, Envive, Akamai, CDW

*Supervised the following projects:*

- Rolled out of new EMC Symmetrix node, adding 1.5TB of usable storage for photo & video storage
- Added SiteSmith to maintain high levels of uptime and support
- Planned Globalization of Zing's Network (Japan, Europe and US East Coast)
- Evaluated and recommended move to new data center (GlobalCenter to replace Exodus Communications)
- Supervised install and maintained Aria Web Monitoring system
- Akamized new sites static content
- Supervised two Sr. Unix/Network Administrator contractors

**Zing Networks, Inc. (defunct), San Francisco, CA**  
**Systems Administrator (Corporate & Production Networks & Systems) (Full-time)**  
**October '99-July '00**

*Implemented the following from the ground up:*

- VPN with Compatible System's (now owned by Cisco) IntraPort 2 VPN router, with Win 95/98, NT 4.0, Linux and Mac clients
- MS Exchange 5.5 SP3, with TrendMicro's ScanMail for Exchange 3.0, Outlook Web Access
- Mapped external site e-mails to Exchange Public Folders
- Rolled out Outlook 2000, gave 3 classes for users, with rave reviews
- ARCServeIT 6.61 for NT, using OFA, Exchange Client, Client for UNIX (Solaris), Tape Library Option (with 30-slot SpectraLogic Treefrog tape autoloader with 1 AIT-2 drive) on 5-day Differential rotation
- Reduced PC architecture to 3 major vendors (Dell, Apple, IBM), and 5 models tailored to company needs
- Created PC purchasing forms and procedures
- McAfee's Total Virus Defense, managed from McAfee Network Management Console
- BoldFish mass-mail server for Linux
- Negotiated Microsoft Open License
- Employee Purchase Program with CDW

*Supported the following:*

- Microsoft DNS & DNS/DHCP/WINS (maintained static routes, migrated DNS to new server)
- Apache 1.3.12 on Linux, IIS 4.0
- 2 NT Domains, with 9 NT 4.0 SP6a servers and 50 desktop and notebook PCs and 6 Macs
- HP EtherJet (installed internal and external print device servers)
- Installed & maintained co-located servers at Exodus Communications in Santa Clara
- BigBrother Network Monitor on Linux

Special Note: Supervised office Cat 5 Ethernet re-configuration & deployment, negotiated cost-effective vendor relationships, stopped company virus problems COLD, smooth transition from Netscape Messaging Server 3.62 to Exchange 5.5 SP3. Promoted from Systems Administrator (internal) to UNIX Systems Administrator for Production (public web site). Y2K updates. Supported 3 US offices, 1 Israeli office.

**Pillsbury, Madison and Sutro, LLP, San Francisco, CA****Systems Management Server Administrator (Contract)****November '98-June '99***Supported the following:*

- SMS 1.2 (Multi-Site) with MS SQL Server 6.5
- Workstation configuration management, application testing and software distribution
- ArcServe 6.5 for NT/Exchange
- Y2K testing

*Employed the following:*

- SMS Installer 2.0 and NT Command Line Scripting
- TCP/IP troubleshooting tools
- MS and third-party NT 4.0 Administration tools (GUI & Command Line)
- Trained help desk on using SMS to assist in end-user systems support

Special Notes: Packaged over 80 applications and patches for distribution to over 1300 NT Workstations**The Internet Industry Standard Magazine, San Francisco, CA****MIS Manager/Network Administrator (Contract)****October '98-November '98***Supported the following:*

- NT 4.0 Server running Services for Macintosh, Print and File Services
- Microsoft Exchange 5.5, Quark QPS Server, Act 4.0 and BackupExec
- Mixed environment of Desktops & Laptops running Mac OS and Windows 95/98
- CTI voicemail & phone system
- Outlook/Outlook Express for Windows and Mac OS

*Employed the following:*

- LANovation's PictureTaker software distribution package
- Deployed Network Associates' VirusScan for Windows 95/98/NT and Norton AntiVirus with PictureTaker

Special Notes: handled budget and ordering, shepherded transition from Act sales database to SalesLogix, documented network and software distribution method, supervised and mentored helpdesk, 60 users in SF, 8 in New York



**Genentech, Inc., South San Francisco, CA**  
**Windows NT/SMS Systems Administrator (Full-time)**  
**February '97-October '98**

*Supported the following for 1,200 end-users:*

- 40 Compaq Proliant NT 4.0 servers and 2 HP 9000s with HP-UX 9 and 10 running Oracle 7
- ArcServe 6.5 for NT with Disaster Recovery, DEC tape autoloader
- Network Associates' NetShield for NT
- MS SMS 1.2 with MS SQL 6.5
- Proprietary applications for Laboratory Management (CALS), Inventory tracking (POMS), Document Management (NovaManage), Manufacturing process management (BPCS)
- FileMaker Pro Server 3.0
- PDC, 4 BDCs
- NT Command Line Scripts for local account creation on over 100 NT Workstations
- Hand-crafted Ethernet cabling for dozens of laboratories
- DLC to Ethernet network migration

*Employed the following:*

- NT Command line scripts
- Heavy documentation for technical and non-technical audiences
- Diplomacy
- Troubleshooting skills and ability to "reverse engineer" installations
- TechNet, various NT & UNIX bibles
- NT Resource Kits (BackOffice and Server/Workstation)
- HP-UX system administration tools, man pages

Special notes: validated, controlled environment, 3 recognition awards, promoted after 10 months, "Exceeds Expectations" on annual review

**Ifusion.com (defunct), San Francisco, CA**  
**Systems/Network Administrator (Contract)**  
**October '96-January '97**

*Supported the following:*

- 2 Microsoft NT 4.0 servers running Services for Macintosh, NT Backup, MS Exchange, and RAS, as 1 PDC and 1 BDC
- Ascend MAX Pipeline Router/Modem Pool
- BayNetworks Ethernet Hubs
- 10 Macintosh design stations, 6 Windows 95 Micron desktops
- 16 Windows 95 ThinkPad and NEC laptops
- Hardware and software product evaluations

*Employed the following:*

- NT Command Line scripting (before it was well documented)
- NT System Administration tools
- Ethernet cable routing
- Proactive/preemptive troubleshooting

Special notes : Fast-paced startup environment prepared COMDEX demo machines, helped QA debut product, showed great time-management

**Volunteer/Small Non-Profit Work**

**[ACCESS/Women's Health Rights Coalition](#)**

**June '03-January '07 (Volunteer Network/Systems Administrator)**

Office desktop and networking improvements, computing environment cleanup, hardware and peripheral recommendations and installation

**Epilepsy Foundation of Northern California, Oakland, CA**

**September '03-July '04 (Reduced Rate)**

Office network re-architecture and upgrades, computing environment cleanup, virus infection clearing, hardware and peripheral recommendations and installation

**Selected Historical Experience (pre-technical career)****Clean Water Action Phone Canvass, San Francisco, CA (major non-profit environmental group)  
Office Administrator/Phone Manager/PC Troubleshooter/Internet Liaison  
1990-1991; 1994-1996***Technical Duties:*

- Responsible for setting up full PC PPP Internet access in San Francisco and Pittsburgh, PA offices
- Replied to off-site e-mail. Internet searching. Windows 3.1 and Internet training
- General computer maintenance including automating daily backups, hard drive optimizing and virus hunting
- Gained working knowledge of: WordPerfect 5.1 for DOS, PerfectOffice 6.01 for Windows, Lotus 1-2-3, Norton Utilities, FoxPro for DOS Query scripting, DOS batch scripting, streamlining DOS and Windows 3.1 configuration files
- Installed ICVerify credit card processing software and trained staff

Special notes: Raised over \$100,000 for organization, one membership call at a time. Quickly promoted to leadership based on canvassing, fund-raising and training skills.

**Bouquet Computing Lab Annex, University of Pittsburgh, Pittsburgh, PA  
Macintosh User Consultant  
1988-1989 (during college attendance, part-time)***Supervised student laboratory:*

- Maintained 60 Apple Macintosh PCs and 2 servers
- Assisted students with software issues and distributed access key floppies

**Carnegie-Mellon University, Pittsburgh, PA  
Macintosh System Administrator/Troubleshooter  
1986-1988***For top administration officials:*

- Performed weekly backups and upgrades on Apple Macintosh PCs
- Troubleshooting software and hardware
- End-user training

**Carnegie-Mellon University, Pittsburgh, PA  
Teaching Assistant  
Summers of 1986-1988 (while in High School)***Assisted VP for Academic Affairs in:*

- Teaching an introductory Macintosh course for 23 to 40 college administrators & professors from major universities around the world
- Special focus on showing students secret power-user tips that make the Macintosh more fun to use.

**Chatham College, Pittsburgh, PA**  
**"Resident Hacker/Apprentice Programmer"**  
**1980-1986 (began while in Junior High School)**

*Self-taught:*

- Languages: DEC BASIC-PLUS, Pascal (with the book [Oh! Pascal](#), first edition), 6502 Assembly Code
- DEC RSTS Operating System on a PDP-11 mainframe
  - First encounter with proto-Open Source code (DEC included source code with RSTS)
  - Wrote additions to LOGIN/LOGOUT code on RSTS PDP-11 to track unauthorized dial-up access
  - First encounter with tab-key command auto-completion (DCL, a new "shell" for RSTS and the PDP-11)
  - First encounter with a multi-user multi-tasking timesharing system
- Microcomputers: Apple DOS, IBM MS-DOS, Macintosh

*Self-supervised:*

- User Consultant for academic community, where I became adept at translating "computer-speak" into layman's terms
- Trusted to supervise computer center unattended at age 12

**Current Studies**

- [Gentoo GNU/Linux](#) (all personal x86 machines running Gentoo since February 2003). Submitted many packages for inclusion in this community-based Linux distribution.
- [Ruby](#) and [Ruby on Rails](#)
- [The C Programming Language](#) (finally)
- Mac OS X (BSD/GNU tools, FINK, X11)
- [Mastering Regular Expressions](#)
- Physical computer system assembly
- Linux Kernel tuning
- [OpenWrt](#), Linux-based replacement firmware for certain inexpensive "SOHO" wireless routers
- Network and computer security
- [MythTV](#), a Linux-based Open Source PVR, built on Gentoo GNU/Linux - working well since August, 2004

**Certification & Courses**

GNU/Linux certification & courses:

- *Certified Linux Systems Engineer, Level 2* - Linux Professional Institute (<http://www.lpi.org/>)
  - Passed 101, 102, 201, 202 exams
  - Gained complete LPI Linux Systems Administrator certification October, 2003
- Red Hat Certified Engineer Course (RHCE 300) 2000

Microsoft certification courses:

- Implementing and Supporting Systems Management Server 1.2 1997
- Internetworking with Microsoft TCP/IP 1997
- Administering NT Server 4.0 1997

**Education**

- Film Production specializing in Lighting/Sound - Pittsburgh Filmmakers, Pittsburgh, PA, 1993 (selected courses)
- Computer Science/English - University of Pittsburgh, 1988-1992 (non-graduate)
- Fox Chapel Area High School, Pittsburgh, PA, 1988