Douglas Wiegley

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Objective

To obtain a position in the field of software development.

Skills

- Languages: C, C++, Lisp, Ruby, Python, Perl, Shell, Assembly
- Web Development: Rails, REST, XML, JSON, memcached, Google Maps, WebDAV
- Messaging: SMTP, MIME, SPF, DKIM, LDAP, Auth, POP, IMAP, iCal, Antivirus, Antispam, Greylisting, Reputation
- Networking: TCP/IP, UDP, ARP, DNS, DHCP, NTP, SNMP, HTTP, SSL/TLS, iptables, ipsec, multicast
- Operating Systems: Linux/Unix, Windows, OS/X
- Kernel Programming: Concurrency, Multi-threading, Asynchronous programming, Drivers
- Other major skill areas: SQL, Sleepycat, Ferret/Solr/Lucene , System administration
- Leadership: Product architecture, Team management, Agile

Experience

iFanMedia

A cloud based mobile platform providing Radio, City and Community Apps on Apple/iOS and Android mobile phones based on Ruby-on-Rails, MySQL, REST APIs, and OpenX. The system currently has 40k users and processes 30k requests per day.

CTO — 3/2010 – present

- Provided architectural direction for the entire product suite.
- Provided management and mentoring including leading a team of four developers and managing contractors.
- Increased productivity and feature turn around by leading team use of Agile and SCRUM development processes.
- Deployed, rewrote and maintained the iFan Mobile API Platform including systems for content distribution, live host interaction, in-context social media conversations and viral sharing.
- Designed and implemented a variety of features including a cloud-based municipal business license database with support for listing customization, mobile-to-mobile chatting, daily deals, mobile ad serving, promotions and analytics.
- Setup and maintained the product development system including automated centralized builds for rails, iOS, and Android, production environments utilizing cloud servers, and basic company services like email, calendar, and bug tracking.

Mirapoint / Critical Path

An appliance-based email/messaging platform, with mail store and security filtering features. Currently delivering five nine's reliability for millions of mailboxes worldwide.

Architect — 2008 – 9/2011

- Improved product performance, stability and maintainability by modifying SMTP to increase throughput by 4x to 20x, rewriting parts of the filtering subsystem, rewriting the asynchronous network engine inside the Mirapoint FastPath MTA, redesigning and rewriting the threading model for the database server, and rewriting the socket passing library to be fully asynchronous.
- Designed and implemented a variety of features including calendar support for co-existing Exchange servers, a search indexer for use with a Lucene search daemon, and operator viewable comprehensive lifecycle timing data for all messages.

- Integrated parts of the Mirapoint and Critical Path code bases including missing authentication and other MTA features.
- Interacted with a variety of departments including QA, technical publications, support, sales and marketing to work on product planning, emergency customer hot site resolutions, training and other issues.

Principal Engineer 2005 – 2008

- Provided management and mentoring including technical leadership for a team ranging from 3 to 25 engineers in porting the Mirapoint OS to Linux and providing support, code reviews and code integration to offsite engineers and contractors.
- Improved product performance, stability and maintainability by leading the redesign of key subsystems, converting threaded programs from I/O blocking to fully preemptible kernel threads, redesigning sections of the Cyrus mailbox architecture, and creating a platform abstraction library.
- Improved product development process by porting benchmarking service to new OS, creating new build system, implementing new installer and adding a variety of test suites.
- Designed and implemented a variety of features including the software half of a bonding NIC failover, unique user IDs for login, auditing and access permissions, IMAP UNSELECT, a three-tier aware folder caching daemon, and a service for publishing and synchronizing folder information to/from LDAP
- Owned a variety of areas including the administration modules, SMTP/MTA, POP, IMAP, DB, and antivirus.

Member of Technical Staff 2000 – 2005

- Improved product performance and stability by creating a highly scalable memory cache, stabilizing the SSL subsystem and standardizing the email address parser.
- Improved product development process by designing nightly performance tests and creating a graphical code review system.
- Designed and implemented a variety of features including greylisting, real-time billing interface, central license server, secure transaction-safe real-time logging, antivirus engine integration framework, custom MIME parser to detect viruses, LDAP tool to synchronize appliance configuration.
- Added hardware support including a diskless version of the appliance, 64-bit atomic integer routines, factory reset feature, automatic hardware detection, and driver back porting.
- Added operating system support including FreeBSD kernel changes for TCP rate/connection limiting and assisting with the port from FreeBSD2 to FreeBSD4.
- Maintained and/or contributed to features in a variety of areas including Trend AV product integration, SNMP, and a multi-appliance management and monitoring tool.

Hewlett-Packard

R&D Software Engineer, Web JetAdmin Project 1996-2000

A web-based application for remote management of network peripherals including printers and scanners.

- Designed and implemented a variety of features including automatic discovery of network nodes, SMTP, BOOTP, alert notification using SNMP traps and polling.
- Maintained and/or contributed to features in a variety of areas including SNMP, HTTP, and a firmware downloader.
- Cross-ported to a variety of Operating systems including Windows NT, Windows 9X, Linux, Solaris, HP-UX, and OS/2.

Education

Carnegie Mellon University 1992 - 1996

Bachelor of Science, Computer Science, minor Psychology