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Objective

To establish myself in a senior technical role in a dynamic organization within which my expertise in systems and network administration, as well as extensive programming experience can be leveraged to further the goals of the organization.

Summary

I am a proficient Software Architect / Sr. System Administrator with over 15 years of programming experience. I also have over 13 years of System/Network Administration experience and am well versed in database development, tuning, and management. My in-depth understanding of computers allows me to rapidly pick up programming languages, applications, and platforms. I have developed, deployed, and managed internet-enabled applications (many web-based) for over 13 years.

Below is a selection of technologies with which I am experienced:

- Programming:** Expert in Perl, shell scripting (bourne shell, awk, sed, etc.) Advanced experience with JavaScript. Proficient in C#.NET, C++, PHP, Ruby, C. Familiar with Objective-C, Java, VB .NET, ASP, Scheme, csh.
- Development:** Proficient with CGI::Application, Catalyst, Ruby on Rails, git, Subversion, HTML, CSS, jQuery. Familiar with AJAX, XML, XHTML. Proficient with Object-Oriented, Imperative, and familiar with Functional programming styles.
- Databases:** Proficient with Microsoft SQL, PostgreSQL, MySQL and familiar with Oracle. Familiar with T-SQL, PL/PgSQL, PL/SQL.
- Platforms:** Expert with Unix (experience with FreeBSD, Linux, Solaris, Mac OS X.) Experienced on Windows (3.1 through Vista.)
- Networking:** Proficient with BGP, RIP, SNMP, TCP/IP, Ethernet (10, 100, 1000 TX/SX), 802.11q, TCP/IP, STP, NIS, NFS, Samba. Familiar with VOIP (Asterisk, IAX, SIP), OSPF, IGMP. Experience with Cisco, Netscreen, Foundry, Lucent.
- Internet:** Expert with HTTP, SMTP. Proficient with DNS, IMAP, POP, RFC822, MIME, Radius, SSL, NNTP, NTP, FTP, Apache, Squid, Bind, Exim, Sendmail, Whois, RRP, DKIM, SPF. Familiar with Phusion Passenger, FastCGI, IPSEC, LDAP, EPP.
- Other:** Familiar with LaTeX, Photoshop, Word, Excel, MS Access.

Highlighted Work Experience

Sr. Software Engineer

Apr 2011 - Present

Toybox Consulting Inc.

- Software Development and Systems Administration for a client in the Domain industry, including business systems development and DNS server customization.

Some related technologies: MySQL, PHP, JavaScript, PowerDNS, BIND, Linux, Perl.

Sr. Software Engineer

June 2009 - Apr 2011

TravelPod.com, a TripAdvisor Media Group company

- Re-implemented the public-facing portion of the blog system during a major overhaul. Ensured no major SEO-affecting changes were introduced through automated regression tests. Included a switch to modern approaches including ORM, caching, AJAX as appropriate.
- Heavily involved in development of the TripWow slideshow creation facilities.
- Performed integration with Facebook APIs for both TripWow and TravelPod.
- Performed various hardware upgrades or major software infrastructure changes seamlessly.
- Responsible for own QA and cross-browser testing.
- Implemented simple yet extensible log-analysis and reporting infrastructure that allows single-pass log parsing and uses SQLite for temporary bulk storage and MySQL for long-term bulk storage.

Currently work as part of a team of 5 developers and a product manager.

Some related technologies: MySQL, Perl, JavaScript, memcached, git, subversion, CGI::Application, SQLite.

Sr. Software Developer

Sep 2008 - June 2009

Macadamian Technologies

- Participated in the ongoing development and maintenance of a C#.NET e-commerce application suite as part of a team extension project.
- Helped co-ordinate task allocation, run daily scrums as needed, and perform other project management tasks on an as-needed basis.
- Assisted junior team members.
- Worked with the client's team members on a regular basis, especially during critical problems.

Worked as part of a team of 7 developers, 2 QA and a project leader spread across multiple locations around the globe.

Some related technologies: C#, .NET, Visual Studio, MS SQL, Subversion, Windows, eCommerce.

Solutions Architect

Feb 2008 - Sep 2008

ToPeer Corporation

- Designed a replacement server architecture and replacement protocol with a 3-stage development plan. Implementation included a common framework for message manipulation, a modular server design, and replacement of the protocol code in the Windows and Mac clients. The server and clients were object-oriented C++.
- Performed UNICODE conversion on the Windows client code, making it utilize UTF-8 except during system calls. The work required character set conversion from the locale-specific MBCS to UTF-8 of data-files and SQLite tables.
- Replaced the client's web-server code with a robust and extensible Boost ASIO based web-server.
- Unified source code for the Mac and Windows clients, eliminating much code duplication.
- Implemented stricter version control practices.
- Implemented an automated build system for Mac and Windows.
- Shared responsibility for office and back-end network and systems administration.

Worked as part of a small development team.

Some related technologies: C++, Objective-C, MSVC, Xcode, MFC, SQLite, PHP, SSL, MySQL, Mac, Windows, FreeBSD, boost, UNICODE, Bugzilla.

Application Developer

Jan 2006 - February 2008

Canadian Internet Registration Authority (CIRA) (*dot-CA registry*)

- Lead developer of a flexible object-oriented replacement for CIRA's WHOIS system. Utilized test-driven development to ensure quality and correctness.
- Implemented both user-facing and administrative portions of a non-profit governance related bilingual web application.
- Created an easy-to use dynamic loading object-oriented interface for accessing Oracle stored procedures.
- Implemented a replacement electronic voting application for the board of directors election, including front-end and administrative interfaces.
- Designed and implemented a cryptographic layer for the elections software based on commonly available crypto libraries, using both private and public keys.
- Implemented a dashboard for monitoring key registry activities and metrics via graphs and/or tables as appropriate.
- Responsible for applying bug fixes and maintaining legacy registry software.
- Assisted the operations team with network and system difficulties as needed.

Worked as part of a small development team.

Some related technologies: Perl, SSL, Oracle, PL/SQL, Apache, Mac OS X, RedHat Enterprise Linux, MySQL, RRDTOol, Catalyst, Template::Toolkit, PDF::API2, Javascript, Ajax, HTML, CSS, XML, DNS, PHP, RSA, Galois field secret sharing, PEM, Canada Post EST software.

Web Developer

2006 - present (ongoing contract)

Holiday Junction

Complete re-implementation of the client's legacy recipe-generated static website into a dynamic website, using Ruby on Rails and PostgreSQL. Created both front-end user experience

to suit the client's needs, and back-end administrative interface. Also responsible for data import/conversion from legacy DBF files, and for creating HTML and CSS from graphical samples provided by the graphic artist. Ongoing systems administration duties and modifications to suit client.

Sr. Technical Specialist

Jan 2003 - Dec 2005

Pool.com (*a Momentous.ca company*)

Initially employed by Momentous.ca as a Sr. System Administrator, I was rapidly moved to the newly formed Pool.com. I wrote a prototype expiring domain name acquisition engine, which outperformed all expectations. An industry leading multi-million dollar business was subsequently built around this technology.

- Assisted in the development of a high-performance multithreaded domain acquisition system in Java for an emerging TLDs sunrise period. Worked with a team of 3 developers.
- Created, maintained and operated a highly successful expiring domain name acquisition engine for the .Com/.Net deleting domain market. This distributed application spanned over 40 systems at a remote data center. It was designed to be resilient, modular, and easily adaptable to a changing environment. Sole developer for most of the project, with 1 additional contract developer/analyst for a 6-8 month period.
- Wrote or maintained acquisition engines for other top-level domains, including .Ca, .Org, .Biz, .Us and .Info.
- Wrote and maintained accompanying high volume business intelligence data acquisition and analysis tools, including maintaining the related large databases.
- Implemented and managed the accompanying monitoring and management suite for the domain name acquisition engines, including numerous performance analysis tools.
- Implemented a simulation environment for the acquisition engine.
- Assisted various departments with data transformation and data mining, stress-testing, and system and network administration.

Some related technologies: RRP, EPP, Perl, SSL, TCP/IP, MS SQL, HTTP, HTTPS, Java, FreeBSD, Netscreen, Packeteer, Cisco, Windows, Apache, PHP, BGP, Exim, IPSEC, Veritas Backup Exec.

Sr. Systems Administrator

Feb 2002 – Dec 2002

Cyberus Online Inc.

Mar 1997 – Jun 2000

Under 3 owners, during two terms of employment, I was involved in all aspects of their network operations and systems development. Highlights from my two tenures include:

- Managed a team of 6 system administrators and programmers.
- Created their open-source based anti-spam system for customer email.
- Implemented their first integrated, web-based account management system.
- Wrote and implemented a systems and network monitoring and alerting system.
- Managed both their internal and external networks.
- Simplified and re-deployed a heterogeneous environment to a unified OS and platform.

- Managed their modem pool.
- Managed several telco and IP carrier migrations, including phone number or IP renumbering.
- Deployed their initial residential DSL offering.

Some related technologies: FreeBSD, Solaris, Radius, RADSL, Cisco, BGP, OSPF, RIP, Apache, IIS, PHP, Perl, NNTP, SMTP, Exim, OpenLDAP, MySQL, MS SQL, Sendmail, Bind, DNS, FTP, POP, IMAP, NetApp, Foundry, Ascend, Lucent, NFS, PPP, ISDN, PRI.

System Administrator

Jan 1996 – Mar 1997

National Capital FreeNet Inc.

- Maintained a SunOS 4 environment running a heavily customized text based BBS system hosting nearly 60,000 accounts.
- Implemented their initial limited access (filtered) free dialup PPP access.
- Managed their modem pool.
- Performed day to day system administration.
- Heavily loaded systems and scattered small disks required careful management of system loading and disk utilization.

Some related technologies: Solaris, Linux, Xylogics Annex 3, Apache, NNTP, INN, Perl, Sendmail, NFS, Bind, FTP, Gopher.

Other Related Employment

Senior Product Architect, Netwinder Technology, rebel.com

Dec 2000 – May 2001

Senior Network Architect, RebelNetworks, rebel.com

July 2000 – Dec 2000

UNIX and Network Administration, Consultant, Accelight Networks Inc. Oct 2001 – Jan 2002

Volunteer Experience

Assistant Webmaster

Mar 2004 - Sep 2006

Camera Club of Ottawa

Providing ongoing assistance and web hosting to CCO.

System Administrator and Programmer

Aug 2001 – Mar 2004

Usefilm.com

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