
Technical Knowledge

Programming Languages/APIs: Python, PHP, Perl, Visual C++/C#, C/C++, Java, SQL, BASH Shell Scripting, JSP (Struts)

Operating Systems: Windows, Linux (Gentoo, Ubuntu, Redhat Enterprise, CentOS), Mac OSX.

Tools: GCC/G++, Visual Studio, SharpDevelop

Other Experience: Systems Administration, Samba, Apache, Tomcat, Exchange, Sendmail, Procmail, IMAP, IP routing, Wireless Networking, LDAP/AD authentication, Proxies, OpenVPN, RAID, HTML, XML, AJAX, GWT

Education

- May 2003 **University of Calgary, Calgary AB**
BSc, Computer Science
- Completed my degree with a concentration on courses surrounding algorithm design, computability, and software development.
 - Undertook a substantial full-year research project with Dr. Peter Høyer studying Quantum Coin Flipping protocols and Quantum Computing in general.

Experience

Pason Systems, Calgary, (January 2004 - Present)

Systems Analyst

- Responsible for the requirements gathering, design, development, maintenance and testing of a web-based application using Python and MySQL that tracks equipment, support calls, drilling rigs, rental proceeds, etc.
- Developed a network-enabled GPS application to track trucks and oil rigs across Western Canada. Later extended the tracking application to manage field support calls and response times.
- Performed server setup and maintenance for Linux (Redhat, CentOS) servers related to our web application and interfaces, along with all applications/daemons used (Apache, MySQL, Python, etc).
- Maintained scripts that ensure our customers are billed for our products and that billing and asset data is synchronized across systems.
- Developed a software update application to remotely deploy new versions of software to clients as well as synchronize and backup field technician documents.
- Developed an application to ensure smooth 1 click installations and updates of Pason software application suites to customers with varying hardware and systems requirements.
- Ported legacy MFC/C++ applications to new C# infrastructure as part of a new workstation initiative to reduce maintenance costs and field technician support calls to oil rigs.
- Developed a J2EE/Struts application to correlate oil rig location and customer based rule-sets to selectively distribute software updates.

Zi Corporation, Calgary, (May 2002 – September 2002)

Software Developer

- Developed and maintained a mobile phone emulator in MFC/C++ that supported over 15 locales.
- Developed text processing tools and input emulators for use under vxWorks running on embedded systems.
- Interfaced with Zi's ANSI C library for mobile text input.
- Use of Unicode standard in the application of over 15 (human) languages in the cell phone emulator.

Personal Projects

jobeus.net Administrator, Calgary, (July 2001 – Present)

Linux Administrator

- Administrate Linux-based web and mail for 20+ users.

job_gallery Project, Calgary, (January 2007 – Present)

Open Source Project Administrator

- Created a PHP based photo gallery application which integrates Google Maps with geolocation data found in image metadata or defined by user on upload.
- Was one of the first projects to mash photo galleries with Google Maps.
- Project was featured on *digg.com* and *slashdot.org* on the same day in April 2007, serving over 4 million requests to 50,000 unique visitors over a 24 hour period.
- Sample installation can be found at: <http://gallery.jobemedia.org>

wMail Project, Calgary, (October 2004 – October 2006)

Open Source Project Administrator

- Started a new project forked from the *kmMail* project which is a lightweight PHP-based webmail project.
- Added features such as multiple attachment abilities and fixed issues with viewing attachments and HTML e-mails over 5 milestone releases
- Project still available at Sourceforge.

Volunteering

2001 – 2009 **Calgary Youth Science Fair** (Judge)
2003 **Canada-Wide Science Fair** (Judge)

Other Interests

- Snowboarding
- Mountain biking
- Ultimate Frisbee
- Soccer
- Reading
- Travelling
- Movies
- TV
- Electronic Music