

Profile

Passionate software engineer with specialization in building fast, small and efficient code in everything from assembly to Ruby.

Career highlights

As a professional

- Leveraged specialized knowledge in Linux systems programming to develop a high performance database for serving millions of streaming records and to facilitate customized queries.
- Developed self updating, cross platform, multi-threading optimized and easy-to-use end user applications.
- Built a full spectrum integrated application suite from embedded device to the desktop to the web.
- Developed a fast, effective and reliable low-level communication protocol for communicating with ultra low power embedded devices.
- Created data visualization tools from the ground up, allowing customers to visualize and manipulate hundreds of thousands of data points in real-time.
- Utilized Open Source tools to drastically reduce development time, thereby decreasing development costs and delivering high quality software solutions to customers in a timely fashion.
- Created a cross-platform automated software build solution to decrease development-to-testing period.

As a hobbyist

Significant contributor to numerous open source projects, including the Linux kernel, SQLite, MPD, Gentoo, TokyoCabinet and more. Creator and maintainer of some popular projects, maintaining and continuously developing software used by thousands of individuals on a daily basis. Built a strong and growing community of supporters and enthusiasts for the following projects:

- Conky, a dynamic and extensible system monitor used by professionals and normal users alike. Conky is featured in the default desktop installation of some prominent Linux distributions.
- Omploader, a file and image hosting service.

Full source code for these projects and others is available at <http://git.omp.am/>.

Experience

Newfield Wireless

Berkeley, CA, United States

2009 - present

Senior Software Engineer

- Leveraged 3GPP layer 3 expertise to:
 - build a UMTS network data parser and indexer.
 - design and implement a suite of real-time 3GPP LTE capture/parsing tools.
- Created a customized database solution with integrated flexible query language for accessing millions of streaming records in real time.
- Designed and implemented a reporting library for generating key performance indicators from vast quantities of raw data, leveraging previously mentioned customized database.

- Introduced new development and debugging methodologies to the team which significantly improved the pace of development and quality of deliverables.
- Assisted junior and senior developers on all aspects of software engineering.
- Oversaw design and implementation of schema-based XML software specifications.

Real Time Measurements Inc.

Calgary, Canada

Oil & gas instrumentation and technology producer.

2009 - present

Consultant

- Part-time consultant on various matters.

2003 - 2009

Software Development Manager

- Developed end user applications, web services, and embedded software.
- Involved in strategic planning, performance and productivity improvement, organizational design, e-commerce, new media and Internet promotion.
- Planned, participated, and coordinated team building exercises while demonstrating strong leadership skills.

2003 - 2009

IT Manager

- Configured and managed servers, automated backup systems, and provided support for customers as well as in-house support.
- Leveraged new technologies to enhance our product-to-customer experience in a timely and cost effective fashion.
- Implemented cost reduction IT strategy to make use of existing infrastructure instead of requiring further equipment purchases.

Skills

Very talented programmer, with ample experience in many languages and technologies. Very fast learner, with strong abilities to self teach. Strong functional and imperative programming skills, with a speciality in creating optimized code on any platform. Very strong written and verbal communication skills.

Top 8 languages and technologies (in no particular order):

Programming languages

- Java
- C++
- C
- Python
- Ruby
- SQL
- Javascript
- x86, MIPS, PPC, PIC, 68HC11, assembly

Technologies

- Qt, GTK+, Xlib
- XML, XSLT, XSD, Relax NG, Protocol Buffers
- MySQL, PostgreSQL, SQLite, Oracle
- Amazon Web Services (EC2, S3)
- Memcached, TokyoCabinet, QDBM
- Ruby on Rails, Django, CGI
- Git, SVN, CVS
- CMake, autotools, gdb, gprof, Valgrind, GTest

Education

BSc in Computer Engineering

2003 - 2007

Calgary, Canada