

AARON ALTMAN
aaron@tomorrowfunction.com
503-569-4475

TECHNICAL SKILLS

Languages

- Python, IA32 and x86-64 assembly, C, C++, Java, Lisp (Scheme), Javascript, SQL, PHP, Ruby on Rails

Tools

- VTune, Intel Performance Tuning Utility, gcc, gdb, SVN, WinDbg, bash, csh, Eclipse, Valgrind, objdump, make, PIX for Windows, ldconfig, ldd, Extensible Firmware Interface, Pin, regular expressions

Operating Systems

- Linux (Ubuntu, Slackware, Gentoo, Debian), FreeBSD, Windows, OS X

APIs and Formats

- MPI, OpenMP, POSIX system call API, pthreads, Executable and Linkable Format (ELF), HTML, CSS, XML, ASP

WORK EXPERIENCE

Performance Validation Engineer

Intel

2008-present

- Profiling with VTune, perfmon and Intel Performance Tuning Utility (PTU) to identify hot spots and tie degradations to engineering decisions made earlier in the development process.
- PCI Express protocol analysis using LeCroy tracing tools to examine runtime behavior with real workloads.
- Reverse engineering application behavior with disassembly and basic block analysis.
- Performance debugging with the Pin runtime instrumentation framework, and proprietary execution tracing and simulation tools.
- Weekly collaboration to resolve issues in a cross-geographic, interdisciplinary forum.

Programmer

ECONorthwest

2008

- Administered Mac OS X desktops and intranet servers, PostgreSQL databases, and customer facing FreeBSD servers.
- Evaluated, chose and installed new intranet calendar software. Wrote Python scripts to parse and translate data from the outgoing calendar system.

- Managed releases with SVN version control.
- Designed and coded bug fixes and features in Ruby on Rails websites.

Software Engineering Intern

Boeing

2007

- Wrote formally defined documentation including customer change requests, functional specifications, and configuration management instructions.
- Coded bug fixes and supported user help requests in an Oracle and ColdFusion e-learning suite.

Software Engineering Intern

Intel

2006

- Developed a PHP and MySQL document management system for factory preventative maintenance.
- Implemented new features and fixed bugs in an ASP and Microsoft SQL Server intranet site tracking scrapped wafer lots.

ACADEMIC EXPERIENCE AND RELEVANT COURSES

B.S., double major in Computer Science and Mathematics

Portland State University

2008

- CS415 Advanced Parallel Programming
- CS321 and 322 Language and Compiler Design
- MTH256 Applied Differential Equations
- MTH444 Advanced Linear and Multilinear Algebra
- CS200 and 201 Systems Programming
- CS333 Operating Systems