

BRUCE CHRISTENSEN

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Experience

Embedded Software Engineer January 2009–present
Apple, Inc., iPod Engineering Cupertino, California

- I teach iPods new tricks.

Intern May–August 2008
Apple, Inc., iPod Engineering Cupertino, California

- Developed drivers and system- and application-level firmware for ARM-based iPods.
- Designed manufacturing processes in collaboration with factory.

Software Engineer Intern June–August 2007
Google, Inc., Telephony Platform Team Kirkland, Washington

- Developed scalable, multithreaded telephony server software in C++.

Software Development Engineer Intern May–August 2006
Microsoft Corporation, Common Language Runtime Team Redmond, Washington

- Reverse-engineered, implemented in C#, tested, and documented several libraries for IronPython.
- Improved exception handling and threading in the IronPython compiler and runtime system.

Avionics Team Lead January 2006–June 2008 (member since August 2005)
Brigham Young University, ARES Rocket Project Provo, Utah

- Led five-member team in requirements analysis, design, and implementation of embedded hardware and software for command and control, data collection, and flight communication of 20-foot rocket.

Lead Programmer February 2005–December 2008
Brigham Young University, Chemistry Department Provo, Utah

- Led the design, scheduling, and implementation of web-based department business applications.
- Supervised and trained other programmers; made hiring recommendations.

Other Experience

- **Lab Assistant, BYU Natural Language Processing Lab**, 2007–2008, Provo, Utah. Improved pitch tracking analysis for automated spoken language identification system; administered lab systems.
- **Lead Developer, XML Résumé Library** (open source project), 2001–2002. Led development team; significantly improved XML DTD and XSL stylesheets; wrote 150-page DocBook user guide.
- **Internet Programmer, Orangatango, Inc.**, October 2000–May 2001, Provo, Utah. Implemented an anonymous email system using Perl and Postfix; re-wrote our web application's DHTML interface.

Education

Bachelor of Science in Computer Engineering December 2008
Brigham Young University Provo, Utah

- GPA: 3.75 (out of 4.0).
- Courses of interest: real-time operating systems, embedded systems, compilers, signal processing, computer architecture, circuit design, machine learning, statistical natural language processing, networking, theory of computation, linear algebra, statistics, technical writing.
- Notable embedded systems and digital hardware projects included RTOS kernel (C and x86 assembly), SDRAM controller (VHDL), microprocessor (Verilog), PowerPC drivers for interrupt and AC97 sound controllers (C), team leader for autonomous vision-guided robot (C, VHDL).
- Awards: dean's list, 2005–2006; university academic scholarship, 2005–2008; AIAA undergraduate scholarship, 2007–2008; best in session, BYU Spring Research Conference 2007.

Skills

Significant professional experience with:

- C, C++, C#, Python, Perl,
- Oracle, PostgreSQL,
- Linux administration,
- PHP, JavaScript
- MySQL, SQLite, LDAP
- Windows, Mac OS X
- (X)HTML, CSS, HTTP
- Perforce, Subversion, CVS
- TCP/IP networking,
- XML, XSLT, XSL-FO
- Apache, Postfix, BIND
- firewalling, VPNs

Non-trivial experience with x86 assembly, Java, VHDL, and Verilog in university courses. Conversational spoken and written Spanish. Excellent English writing, editing, and proofreading. Prankster extraordinaire.