

SKILLS SUMMARY

Web Application Development

- Strong knowledge of HTML5, JavaScript and CSS3 in Webkit, Gecko and Trident browsers
- Good understanding of AJAX technology using both XML and JSON
- Familiar with using Javascript (node.js), Python, JSP and PHP for server side development
- Experience with SQLite, MySQL, and SQL Anywhere

C/C++ Development

- Good understanding of developing physical device drivers in an object-oriented style
 - Familiar with digital signal processing techniques, especially with audio and images
 - Experience using OpenGL for both 2D and 3D graphics
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EDUCATION

University of Waterloo; Sep 2008 - Apr 2013

- Candidate for Bachelor of Software Engineering, Honours Software Engineering
 - Advanced Courses
 - Numerical Computation (CS 370)
 - Computational Vision (CS 484)
 - Introduction to Computer Graphics (CS 488)
 - Digital Signal Processing (ECE 413)
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WORK EXPERIENCE

Software Engineer Intern, Microsoft Corp., Redmond, Washington; Jan - Apr 2012

- Ported an audio processing library from Windows to the Xbox 360 kernel for a device driver
- Improved CPU performance by over 750x and memory usage by over 5200x
- Worked with testing engineers and program managers to ensure that code worked as expected

Software Engineer Intern, Google Inc., Mountainview, California; May - Aug 2011

- Added accessibility for low-vision and blind users to the Pepper Plugin API (PPAPI)
- Modified existing Native Client applications to work with the new PPAPI version
- Added accessibility to existing Native Client applications

Software Engineer Intern, Sybase iAnywhere, Waterloo, Ontario; Sep - Dec 2010

- Researched the possibility of replacing native mobile applications with web applications
- Developed a JavaScript library to create native quality mobile web applications

- Cloned a CRM native application as a web applications, matching performance

Software Engineer Intern, Qualcomm Innovations Center, San Diego, California; Jan - Apr 2010

- Worked with the Symbian OS Multimedia Audio Team
- Designed and developed a physical device driver for the Windows emulator
- Wrote a debugging tool to log running processes on the target device

Ground Segment Intern, Canadian Space Agency, Saint-Hubert, Quebec; Apr - Aug 2009

- Developed an internal application using Java, JSP, and JavaScript
 - Wrote SQL queries for Oracle 10g Database
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PROJECTS

Speechboard

- Automatic transcription application for meetings, with a large focus on simplicity for users
- Developing algorithm that analyzes voice data to determine who is speaking at what time
- Algorithm analyzes frequency spectrum of voice and creates a voice print for each speaker

Personal Website

- Used node.js to create the server
- Strong focus on client side JavaScript
- Used HTML5 (JavaScript and CSS3) technologies with fallbacks for legacy browsers

Soccer Emulator

- Created a text based soccer game simulation that takes team stats as input
 - Outputs play by play game summary and final scores
 - Simulated various single game issues such as morale
 - Developed a learning mechanism so that teams would improve after each game
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INTERESTS

Music

- Professional musician and composer
- Instruments include guitar, piano, electric bass, stand-up bass and drums

Sports

- Captain of a soccer, volleyball and slo-pitch intramural teams
- Played many competitive sports including allstar teams in soccer and baseball