

SKILLS**Technical Knowledge**

- C++: 5 years of experience through work, personal projects, contests, robotics, and school
- JavaScript: Optimizations and browser bug workarounds for Google Docs
- Moderate experience: Python, C, C#, Qt, Django, Google Closure, mobile web
- Prior experience: Bash scripting, Scheme, CSS
- Platforms: Linux command line, Ubuntu, Mac OS X, Windows
- Tools: Proficient with Vim and Git; worked with Perforce, SVN, Visual Studio

Projects

- First place optimizing compiler for university competition
- Artificial intelligence bots: Gomoku, competition Tron, competition Rock-Paper-Scissors
- WEP/WPA penetration-testing GUI application on BackTrack 3
- Multiple web apps: backends in Django + MySQL and C# + ASP.NET
- Designed and implemented a trie-based word-prediction system for an educational toy robot
- MSN plugins: conversation bot, multiplayer display name game
- High school: FIRST Robotics controller, Xbox 360 game, tournament scheduler, automation scripts

General

- Regularly competes in programming contests, including ACM, Google AI contest, CCC, Project Euler, USACO
- Interested in artificial intelligence, compilers, algorithms, and functional programming

**WORK
EXPERIENCE**

Google Software Engineering Intern in Test
Mountain View, CA January 2011 - Present

- Designed and implemented a multi-threaded cross-platform GUI automated testing framework for Google Earth in C++

Google Software Engineering Intern (Mobile)
Waterloo, ON May - August, 2010

- Implemented product features for Google Mobile Docs by finding creative workarounds for browser bugs
- Derived cubic Bezier math for web-based smooth scrolling using CSS 3D transforms
- Optimized speed by exploiting JavaScript implementations and improving data structures

TD Bank Financial Group IT Student Analyst
Toronto, ON Summer 2009

- Developed in-house software to process business data, generate reports, and automate tasks, saving an estimated 65 minutes daily
- Consistently completed projects ahead of schedule
- Provided technical assistance to other programmers; was sought after by other departments

CSC Assembly (Computer Store) Repair assistant
Toronto, ON Summer 2007, 2008

UNIVERSITY ACTIVITIES	Entrepreneurial Project Programmer Winter, Fall 2010 Developed a motivational learning website and professional network-building service in teams of three and four, respectively. http://velocity.uwaterloo.ca/student-posts/heres-looking-at-you-cinq-me
	ACM Programming Contest Competitor 2009 Fall Trained five hours twice per week with teammates on algorithm problems. Rapidly wrote and debugged code during competition; attained 13th place out of 115 teams at the ECNA Regionals.
	Software Engineering Class Representative 2009 Fall - Present Took the initiative to write weekly email updates to the class. Co-founded the <i>Give Me Your Knowledge</i> student talks series.
	IEEE Student Branch Member 2009 Fall - Present Designed and implemented a mailing system for U Waterloo's IEEE website in ASP.NET and C#.
HIGH SCHOOL ACTIVITIES	Programming Team Leader 2007 - 2009 Revitalized club: advertised, recruited, taught lessons, organized practices, motivated participants. Achieved top 5 in provincial competition.
	FIRST Robotics Team Leader 2008 - 2009 Facilitated communications, organized meetings, and headed programming team.
	Programming Competition Finalist Mar. 2009 National Bronze Medalist (top 20 in Canada) in the Canadian Computing Competition.
	Programming Competition Champion Oct. 2008 Bot coded in Java attained first place in Toronto-area high school AI competition. https://www-927.ibm.com/ibm/cas/cascon2008/hspc/results.html
	Peer Tutoring Club Lead Tutor 2008 - 2009
	Xbox Media Trade Show Presenter Aug. 2007 Invited by Microsoft to present a video game developed using C# in XNA at X07 in Toronto. Was a hit with the blogs: http://www.thebbps.com/articles/content/x07-warpong.html
EDUCATION	Candidate for Bachelor of Software Engineering University of Waterloo 2009 - 2014 (expected) <ul style="list-style-type: none"> Member of the VeloCity start-up incubator (http://velocity.uwaterloo.ca) for two terms
	High School Diploma Western Technical-Commercial School, Toronto 2009 <ul style="list-style-type: none"> Enrolled in the gifted/enriched program; highest average in graduating class (97.5%)
AWARDS	<ul style="list-style-type: none"> Math and Engineering Dean's Honour List for all terms, University of Waterloo Engineering Faculty Entrance Scholarship, University of Waterloo Queen Elizabeth II Aiming for the Top Scholarship Governor General's Academic Medal, Western Tech Euclid Mathematics Contest School Champion, Western Tech McCall Award for Computer Science and Engineering, Western Tech Student Recognition Award, Western Tech
INTERESTS	Ping pong, biking, swimming, jogging, camping, reading, free food