Felix He

linkedin.com/in/felixhe97 | felixhe97@gmail.com | (778) 680-1978

Award-winning competitive programming team member at the University of British Columbia, extremely proficient in the implementation and application of data structures and algorithms. Wide breadth of computer science skills, developed through hackathons, internships, and extracurricular projects.

Programming Languages and Tools: C, C++, JavaScript, Python, Java, SQL, HTML, CSS, Git, Bash

Work Experience

Software Development Student, Co-op

MAY 2019 - AUGUST 2019

BlackBerry Limited - Security & Firmware - Waterloo, Ontario

- Modernized the security-firmware build system from Makefile to Soong/Bazel, and created a command-line utility with C and Graphviz to visualize the migration's updated build dependencies.
- Removed errors, and refactored Android native vendor code, and within a bootchain-level event-scheduling system, by writing several thousand lines of CMocka fixtures and unit tests.

Technical Systems Analyst, Co-op

JANUARY 2019 - APRIL 2019

Royal Bank of Canada, Capital Markets - Digital Channels - Toronto, Ontario

- Developed a fault-tolerant, LDAP-authenticated proxy-server application and API, with Node.js and Express.js, to wrap an Apache Solr-based search engine serving around 60,000 visitors a day.
- Created a full-stack marketing-analytics visualization tool, with the ability to upload, archive, and manipulate files online, by using HTML/CSS, JavaScript, Batch scripts, and Microsoft SQL Server.

Extracurriculars

Team Member, Division 1

NOVEMBER 2017 - PRESENT

UBC ACM-ICPC Competitive Programming Team - Vancouver, British Columbia

- Implement optimized C++ programs to solve algorithmic/mathematical programming problems.
- Notably placed 2nd out of 73 teams in the 2018 ACM-ICPC PacNW Division 2 Regionals, and in the top-third of all teams in the 2018 North American Invitational Programming Competition.

SquatRackCurl

DECEMBER 2019 - PRESENT

Personal Project - https://github.com/felixhe97/squatRackCurl

- Creating a parallelized HTTP 1.1 command-line client in C, using TCP sockets and POSIX threads.
- Other projects include a JavaScript algorithm library, and the backend of a card game website.

Education

University of British Columbia

EXPECTED GRADUATION: APRIL 2021

Bachelor of Commerce, Combined Major in Business & Computer Science - Undergraduate in Progress