SHERMAN CHOW

[redacted]
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github.com/scc23 scc23.github.io scc23@sfu.ca

Technical Skills

Languages: C, C++, Java, Python, HTML/CSS, JavaScript, PHP, SQL, MATLAB, Julia
Applications: Git, Subversion, Green Hills MULTI, Microsoft Visual Studio, Sublime Text, Eclipse, Vagrant
Web Frameworks and Tools: Laravel, Vue.js, Bootstrap, JQuery
Operating Systems: Windows, Mac OS, Linux

- Solid knowledge of data structures, object-oriented programming, and agile development

Technical Work Experience

Firmware Engineer Co-op **Jan–Aug 2018**
Intel Corporation – Non-Volatile Memory Solutions Group | Vancouver, BC

- Developed firmware in C for the next generation Optane solid state drives
- Created and improved unit tests for new features to ensure that corner cases were exercised
- Updated code and ported bug fixes from previous generation firmware to interface with new hardware
- Developed a software tool in Python with a GUI to generate a visualization of the Optane solid state drive data layout for engineers to debug firmware

Software Engineer Co-op **Jan–Aug 2017**
Sierra Wireless Inc. | Richmond, BC

- Developed APIs in C++, analyzed defects, and fixed bugs for *AirPrime* modules with a team of 12 people
- Implemented new functionalities in our test application to test corner cases and validate new features
- Investigated new features using Microsoft Azure and mobile device management solutions to develop new capabilities for our products

Technical Projects

Music Synchronization Web Application **Oct–Nov 2018**
Web-based Information Systems (CMPT 470) – Simon Fraser University | Burnaby, BC

- Collaborated with a team of 6 students to develop a web application that allows users to create and join sessions to listen to synchronized music, and chat online
- Utilized the MVC architecture, LEMP stack, Laravel, Vue.js, and Bootstrap to create a dynamic website
- Interfaced with the Spotify Web API to add user authentication, fetch music data, implement a search bar to search for songs, and to create a music player

Producer-Consumer Problem **Nov 2017**
Operating Systems I (CMPT 300) – Simon Fraser University | Burnaby, BC

- Developed a multithreaded program written in C using pthreads and semaphores to solve a multiple producer-consumer problem with various constraints
- Applied a mutex to lock the critical sections when a thread accesses shared resources to avoid a race condition
- Implemented conditions and tested corner cases to avoid deadlock

Shogi Japanese Chess Game **Sept–Dec 2016**
Introduction to Software Engineering (CMPT 276) – Simon Fraser University | Burnaby, BC

- Collaborated with a team of 5 students to develop a chess game in Julia (programming language) with artificial intelligence, a GUI, and networking capabilities
- Developed multiple AI difficulties using the minimax search with alpha-beta pruning algorithm
- Integrated components and fixed bugs to ensure a runnable software on multiple operating systems

Education

Bachelor of Science – Major in Computing Science **Sept 2013–Aug 2019**
Simon Fraser University | Burnaby, BC

- Dean's Honour Roll, achieved a term GPA of 3.75 (Spring 2016)
- Studied one year abroad at *Zhejiang University* in Hangzhou, China (Sept 2014–June 2015)