Ryan Liu

Contact Info

Cell Phone
+1 (778)-896-9099

Personal Website
ryanliu6.xyz

GitHub
github.com/ryanliu6

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LinkedIn
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Programming Languages

Java

C & C++

Python

JavaScript

HTML & CSS

Development Skills

NoSQL Database Design

Firmware Development

Test Driven Development

Front & Backend Development

Development Technologies

OpenCV

Git & SVN

GoogleTest

GoogleMock

Google Protobuf

Linux Systems & CLI

Education

09.2014 - 12.2019	**Bachelors** of Applied Science *Major in Computer Engineering, Minor in Mathematics*	*The University of British Columbia* **Current GPA:** 3.7

Work Experience

09.2017 - **Motion Metrics International**   *Vancouver, BC, Canada*
12.2017 *Software Developer Intern*

- Improved customer experience and system stability by eliminating uncaught bugs through implementing system and unit tests using GoogleTest and GoogleMock
- Decreased number of false alarms by revising data collection algorithms through reducing density of clusters and increasing total number of collected points
- Sped up overall system performance by more than 10% by removing layers of abstraction and refactoring legacy code to leverage standard C++11/14 libraries

01.2017 - **SMART Technologies**   *Calgary, AB, Canada*
09.2017 *Firmware Engineer Intern*

- Designed an innovative serial-based control system in C++ to manage SMART's latest SMART Boards through the implementation of test-driven development
- Validated system functionality of latest SMART Boards through an automated test environment implemented in C++ using above control system
- Prototyped next generation NFC based education SMART Boards by constructing custom NFC chips and readers in hardware and firmware

Technical Projects

12.2018 - **ryanliu6.xyz**
01.2019 *Personal Website*

- Built a lightweight static website using GatsbyJS and ReactJS that dynamically renders react components through usage of external JSON data

02.2018 - **Cleanify**
04.2018 *Atom Package*

- Built an Atom package to refine code based on user-specified keywords using JS
- Integrated ability to modify keywords or to remove lines completely on the fly

12.2018 - **CheckedOut**
01.2019 *CPEN 321 - Software Engineering*

- Developed custom MongoDB driver in Python for efficient cataloguing of retail and grocery stores in the Greater Vancouver Area
- Provided fast and optimized search results based on user interest and search history by implementing a custom caching algorithm for MongoDB

Interests

Professional: Web dev, Database design, Firmware dev, Operating Systems, and Math

Personal: Reading, Writing (aspiring author), Fitness, Cooking, and eSports