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## Education

University of British Columbia, Vancouver BC, Canada  
BSc Computer Science

2019-2023  
Cumulative GPA: 94% (4.33)

Coursework: CPSC 221 **Algorithms & Data Structures** (96%), CPSC 213 Computer Systems (97%), CPSC 210 **Object Oriented** Software Construction (100%), CPSC 110 Computation, Programs & Programming (97%), CPSC 121 Models of Computation (98%)

Honours/Awards: Science Scholar / Dean's Honour List

Scholarships: UBC Centennial Leaders Major Entrance Scholarship (Full ride), Horatio Alger National entrepreneurial Scholarship

## Experience

**UBC Launchpad**, Vancouver, Canada

Software Developer

Sept 2019 – Present

- UBC's software engineering design team. Created a realtime leetcode player vs player web app with Node.js, React, Redux, and web sockets. Used Travis for **continuous integration**.
- Currently working on implementing a machine learning 3d pose machine vision model to aid with affordable and accessible physiotherapy

**UBC UAS (Unmanned Aircraft Systems Design Team)**, Vancouver, Canada

Sept 2019 – Present

Software Engineer

- Developed a **python flask API** using **docker** as a container for the on-board communications software for the purpose of obstacle avoidance, obtaining telemetry, and data processing
- Migrated frontend ground control software using **React** hooks and **Redux** for state management

**Bitbox Design**, Vancouver, Canada

Sept 2018 – Present

Founder

- Currently managing all aspects of the agency including: client acquisition, sales, marketing, and developing PHP WordPress sites & marketing strategies for other businesses.

**Freelance Software Developer**, Vancouver, Canada

Jan 2016 – Aug 2018

- Successfully approached & contracted work from multiple companies and individuals, turning business problems into **technical solutions**
- Saved **30 minutes** of daily labour for an ecommerce site with a **PHP/MySQL** inventory system
- Developed a python script that processed business data and displayed it in a readable, sorted format
- Developed a PHP/MySQL online e-commerce shop to take pre-orders for a startup

## Some Personal Projects [more at stuffbyliang.com!](http://stuffbyliang.com)

**UBC Realtime Course API**, [github.com/StuffByLiang/realtime-ubc-courses-api](https://github.com/StuffByLiang/realtime-ubc-courses-api)

July 2020

- Engineered a REST API to scrape UBC's courses in realtime using **Typescript**, **Node.js** and Express, since our school has no reliable and easy to use course searcher or course availability checker
- Wrote a large, **comprehensive test suite** using **Jest**, with **robust documentation** of endpoints
- Cached data is stored in a NoSQL **MongoDB** Atlas instance to significantly increase speed

**StockGame.ca Investment Simulator**, [stockgame.ca](http://stockgame.ca)

Mar 2016

- Developed a full-blown stock and cryptocurrency market simulator.
- Data stored using **PHP**, **MySQL** in the backend. Frontend built using HTML5, CSS, and Javascript.
- Used an MVC tech architecture to allow for **easily maintainable** and scalable code
- Deployed via a self-hosted **Ubuntu** Server using **Nginx**. Currently 200+ users & 3000+ transactions.

## Skills & Interests

**Interests:** Entrepreneurship, Investing, Ultimate Frisbee, Various Board Games & Video Games, Poker

**Hackathons:** 7 Hackathons, **3-time** winner (NWHacks 2020 top 10) (BizHacks 2020 2<sup>nd</sup>) (MLH NHWT 2<sup>nd</sup>)

**Activities:** High School Math Coach, Competitive Programming Coach

**Technologies:** React, Node.js, Redux, Docker, Express, Flask, CSS, SASS, jQuery, MongoDB, MySQL

**Languages & Tools:** JavaScript, TypeScript, Java, Python, PHP, C++, Linux, Nginx, Apache