

Liang Liu

COMPUTER SCIENCE · SOFTWARE ENGINEER · FULL STACK DEVELOPER

Vancouver, BC Canada

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Skills

Tools Docker, Linux, Nginx, Apache
Back-end Express, Flask, MySQL, MongoDB, Objection.js (ORM), Socket.io (Web Sockets)
Front-end React, Redux, HTML5, SASS, JQuery
Programming Node.js, JavaScript, Java, Python, PHP, C++, Git

Education

University of British Columbia (UBC)

Vancouver

BSC IN COMPUTER SCIENCE

2019 - 2023

- GPA: 93%
- UBC Centennial Leaders Major Entrance Scholar
- Horatio Alger National Entrepreneurial Scholar
- Relevant Coursework: CPSC 210 Software Construction (Java OOP) , CPSC 110 - Computation, Programs, and Programming (97%) , CPSC 121 Models of Computation (98%)

Achievements

- 2020 **2nd Place**, Bizhacks BestBuy Case Competition
- 2020 **Top 15**, nwHacks Hackathon
- 2019 **1st Place**, SHAD Lakehead sustainability innovation case competition
- 2019 **88th percentile**, Waterloo Senior CCC, high school competitive programming contest

Experience

UBC Launchpad

Vancouver

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. Currently working on implementing a machine learning 3d pose machine vision model to aid with affordable and accessible physiotherapy.
- Practiced agile development in a group setting

UBC UAS (Unmanned Aircraft Systems Design Team)

Vancouver

SOFTWARE ENGINEER

Sept. 2019 -

Present

- Tasked with implementing ground control software in a team environment:
- Developed a python flask API for the on-board software that allows real-time communication with a drone in flight for the purposes of obstacle avoidance, routing, obtaining telemetry data, and data processing

Freelance Software Developer

Vancouver

SOFTWARE DEVELOPER

Jan. 2016 -

Aug. 2018

- Successfully approached & contracted work from multiple companies and individuals, turning business problems into technical solutions
- Saved 30 minutes daily of redundant manual labour for an e-commerce site with a PHP/MySQL inventory system
- Developed a python script that processed key 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

Highlights of Personal Projects

Alumni Connect

<https://github.com/StuffByLiang/alumni-connect>

2019

NODE.JS, EXPRESS, REACT, REDUX, MYSQL, OBJECTION.JS (ORM)

- Developed a full stack web application for alumni networks to allow members to connect with one another
- Reinforced MySQL relational database design knowledge, and optimized it through table relationships
- Separated business logic from the MVC (Model, View, Controller) tech architecture to allow for scalable code
- Managed global state through Redux, and developed Components using React

ThePhysio.Space (NWHACKS 2020 Winner of Wolfram top 30 award)

2019

NODE.JS, EXPRESS, REACT, MACHINE LEARNING, GOOGLE

FIREBASE, TENSORFLOW

- Leveraged React and Google's Machine Learning Model to analyze 3d pose data to create an affordable physiotherapy app. Deployed on Google Firebase.

Direction Message (DM) Us

2019

FLASK, PYTHON , GOOGLE APIS, TWILIO TEXT API,

MICROSOFT AZURE

- Implemented Google APIs and Twilio into a flask API to create a mobile number that can give you updated real-time bus directions through text, WITHOUT the use of cellular data. Deployed on Microsoft Azure

Stockgame.ca

2016

PHP, MYSQL, HTML, CSS, JQUERY, AJAX, NODE.JS,

EXPRESS

- Developed a full-blown stock and cryptocurrency market simulator. Currently has 200+ users with over 3000+ transactions.
- Created API endpoints for many features such as loans, buying, selling, rankings, and transaction history.
- Learned the pattern of REST APIs, including user authentication, sanitizing and securing user input, and using external APIs