

Computer Science Pure Mathematics

github.com/jimmyqiji j35qi@uwaterloo.ca jimmyqi.me 778 323 6466

# **SKILLS**

Languages: C++, C, JavaScript, Python, Scheme, SQL, R, CSS

Others: NodeJS, ReactJS, PostgreSQL, Backbone, Handlebar, Mocha, Chai, NightmareJS, Scikit-Learn, Tensorflow, Git

### WORK EXPERIENCE

## **Software Developer |** Hubdoc – A Xero Partner

May 2019 – Aug 2019

- Built and maintained 50+ JavaScript web-scrappers that download bills from various billers (eg. Banks) to expedite my client's accounting workflow by consolidating documents and help them scale their practice
- Implemented a search for users feature using Node and SQL that saved the Customer Support team tons of time
- Investigated a more reliable metric of success which was useful for prioritization and recruitment as part of work report

## **PROJECTS**

## Mappify | A Maps Chrome Extension

Jul 2019

- Scraped MLH.io to retrieve Hackathon information and adapted the UI to integrate a map marked with hackathon locations using JavaScript
- Accelerated the hackathon finding process for students by eliminating the need to toggle between MLH and google maps

### **EtherRide** | Best Use of Blockchain Award @ UofTHacks

Jan 2019

- Constructed an autonomous "Uber" using blockchain to provide legal reliability between human-computer interactions
- Adopted Node to link frontend React to sponsor's SmartCar API to securely control vehicles once smart contract executes

Dec 2018 Vim | Text Editor

- Implemented a C++ clone of Vim with over 50 commands following OO principles and utilizing various design patterns
- Formulated methods for undoing commands and kept history in a stack which can be popped for unlimited undos

## Avacancy | HackPrinceton

- Employed Python's Computer Vision to identify vacant parking spots using object recognition on security camera footage and directed drivers to appropriate vacancies.
- Incorporated image transformations from camera POV to an aerial perspective for extra readability

#### **Journal of Wine** | Regression and Classification of Wine

Jun 2018

- Used Python to perform feature selection and constructed regression and classification models on ratings of red and white wine with 93% accuracy
- Visualized data using Seaborn plots and documented a Jupyter journal for educational purposes

### **ACTIVITIES**

# Actuarial Science Club | Event Coordinator

Jan 2018 - Apr 2018

- Organized and directed weekly events with tasks including meeting up with a representative from the largest actuarial association in North America, SOA, to collaboratively formalize the details of SOA Outreach Day
- Actualized connections formed in London Life during internship to arrange a collaborative Trivia Day event

# Math Club | Co-President

Sep 2016 - Jun 2017

- Created weekly problem sets targeting advanced concepts and led discussions to promote critical thinking
- Presented key mathematical ideas to juniors which accelerated their learning experience and improved the school's national ranking to number one in Canada on Fermat 2016

# **EDUCATION**

### University of Waterloo | Candidate for Double Degree in Computer Science, Pure Math, 2022

- Achievements: Dean's Honours List, Mathematics Scholarship, President's Scholarship
- Related Courses: OOP, Data Structures, Functional Programs, Optimization, Statistics, Linear Algebra, Public Speaking

# **INTERESTS**

- I enjoy working out, playing ball, swimming, bouldering and snowboarding
- I am religious when it comes to food and cooking, my childhood dream was to become a food connoisseur