

Mitchell Ma

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EDUCATION

UNIVERSITY OF BRITISH COLUMBIA | BSC IN MATHEMATICS AND COMPUTER SCIENCE

September 2014 - May 2019 | Vancouver, BC

VOLUNTEER & WORK

TUTOR

September 2013 - Present

- Specialize in teaching mathematics and computer science (up to third year university level)

TEACHING ASSISTANT | MATH TA AT UBC

September 2016 - May 2017

- Responsible for assignment, midterm, and exam grading and office hours for first and second year courses

PROJECTS

MIND THE GAP | ANDROID APPLICATION FOR LONDON'S TRANSIT SYSTEM

July 2016 - August 2016 | Solo | Java

- Implemented parser for London's transit API that transforms JSON and XML into displayable data for the UI
- Partially coded up UI that marks out transit lines and station locations while providing information such as train schedules

INSIGHTUBC | COURSE AND BUILDING EXPLORER FOR UBC

January 2017 - April 2017 | 2 members | HTML • SCSS • TypeScript

- Implemented RESTful API that transforms UBC Pair zip data and extensively tested code base with Mocha
- Coded server that acts as a rudimentary database for manipulating zip data using user provided queries

GSMS | GROCERY STORE MANAGEMENT SYSTEM

September 2017 - December 2017 | 4 members | HTML • SCSS • TypeScript • (PL/SQL)

- Using ERDs, designed BCNF database suitable for grocery-related queries and operations
- Wrote front end webpage and RESTful server that parse and manipulate information stored in Oracle database

POST ME | MOBILE APP TO POST ANYTHING LOCALLY

December 2017 - March 2018 | 2 members | React Native • Java • Swift • SQL

- Responsible for Android-side testing and verification
- Implemented user authentication with Google and Facebook integration using Firebase
- Wrote RESTful server that stores and retrieves user data, posts, and messages using PostgreSQL

SCRAPEYARD | CRAWLER AND SCRAPER FOR THE NEW YORK TIMES

January 2018 - January 2018 | Solo | Python 3

- Coded a single-threaded web crawler that runs asynchronously to maximize URL requests
- Multi-process scraper for reading, transforming, and storing articles in large scale

ONCE UPON A TIME | LAN RPG WITH FOCUS IN FARMING, CRAFTING, AND ADVENTURING

January 2018 - Present | Solo | GDScript • Python 3 • C++

- Coded up system for LAN multiplayer, save, character customization, inventory, environmental interactions, and farming
- Created, drew, and rigged all assets using Blender and Illustrator and integrated into game engine

TECHNICAL SKILLS

Familiar with:

Java • TypeScript (JavaScript) • Python 3 • HTML & SCSS (CSS) • \LaTeX • C • C++ • Rust • MATLAB • (PL/SQL) • NoSQL • PHP • Assembly • Visual Basic

I've used these before:

JUnit • Mocha • Jest • Node.js • React Native • Adobe Illustrator • Adobe Photoshop • JetBrains IDE • WordPad