Delmar Zhao

EDUCATION

University of Toronto

Toronto, Ontario Sep 2017 - June 2021

Bachelor of Science, Computer Science GPA: 3.91

Minor: Mathematics

EXPERIENCE

SurveyMonkey Ottawa, ON

Software Engineer May 2020 - August 2020

- Developed features for administrative interface using **Ruby on Rails** and **HAML** to automate and expedite common customer support requests, fulfilling the top five feature requests from the customer success team
- Implemented cron jobs to automatically delete data for GDPR compliance using Sidekiq workers
- Optimized ActiveRecord ORM and PostgreSQL queries, improving runtime complexity.
- Used **RSpec** to write unit and integration tests, achieving over 95% code coverage on new features.

Fortran Traffic Systems Limited

Scarborough, ON

Full Stack Developer

May 2019 - August 2019

- Led development of cross-platform mobile app using **Dart** and **Flutter** to display live map navigation and real-time traffic signal phase and timing information to users, delivering the MVP within two months
- Implemented email and Google account based user authentication using Google **Firebase**, and allowed administrators to create priority accounts with additional privileges for transit and emergency vehicles
- Created **REST API** endpoints with **Nodejs** and **Express** for serving intersection geometry, signal phase, and timing information based on GPS protocol buffer stream
- Optimized REST API responses using gzip encoding, reducing mobile app data usage by 88 percent per nearby intersection

PROJECTS

Sign Language Interpreter

2018

- Implemented sign language interpreter using Python, Flask, and the IBM Watson Machine Learning API
- Evaluated performance to optimize parameters for the dataset
- Won 1st place at Hack the North 2018 for best use of the IBM Watson Machine Learning API

GameCentre 2018

- Designed mobile game hub with **Java** and **XML** using the **MVC** design pattern, to allow users to compare scores with others
- Built several mobile games for the hub in **Android Studio**, and used **JUnit** to automate testing for controller classes
- Used Git for source control and versioning in a group project environment

VoiceKBM 2018

- Transcribed voice input using the Google Cloud Speech API and parsed them into for voice commands for disabled/impaired computer users
- Programmatically controlled the mouse and keyboard using the **Python** PyAutoGUI module, including support for mouse movement, single/double clicks, scrolling, typing phrases, and keyboard shortcuts

SKILLS

Languages: Python, Ruby, C, Java, Bash, Javascript, HTML, CSS

Tools and Frameworks: Git, SQL, Android Studio, Node, Express, Ruby on Rails, React, Linux

Awards

Koch Scholarship

Fred and Mary Koch Foundation

2018 - 2020

Awarded annually based on outstanding GPA, extracurricular activities, community service, and character