TIANYI ZHANG

@ tiaven1104@gmail.com 📞 647-936-2123 🔗 https://tywinzhang.com
in https://www.linkedin.com/in/tywinzhang/ ⌨ https://github.com/tywin1104

WORKING EXPERIENCE

Teaching Assistance - Intro to Computational Thinking
Department of Computing and Software, McMaster University

📅 Sep 2018 – Present   📍 Hamilton, Ontario, Canada

- Led weekly tutorials and provided academic assiatance to **100+** students in a first-year functional programming course based on Haskell
- Significantly improved making efficiency by automating weekly grading tasks for the D2L system using **Python web automation** and **data scraping**

Full Stack Developer
Royal Bank of Canada

📅 May 2018 - Sep 2018   📍 Toronto, Ontario, Canada

- Developed an AI-powered business intelligence system for advisors to provide better clients engagement using **Python Flask** and **Angular**
- Integrated **business data** from various sources and generated daily industry reports by automating the workflow of **5** different tasks
- Designed and implemented scalable **MS SQL** database model and multiple **REST API** endponts
- Implemented caching layer to decrease network calls and improved runtime performance by **40%**

Application Developer
RedReach

📅 Nov 2017 - May 2018   📍 Hamilton, Ontario, Canada

- Built **prototype** and designed **user flow** for our startup project that focused on local youth employment
- Developed exceptional **communication** and **analytical skills** while conducting user feedback interviews and doing **business analysis**

SKILLS

Flask Node.js HTML CSS Angular Bootstrap
RestAPI MySql MongoDB
Docker kubernetes Git Linux Agile Development

PROGRAMMING LANGUAGES

Python   ●●●●●

Javascript   ●●●●○

Java, C, Bash   ●●●○○

EDUCATION

B.A.Sc Computer Science Co-op
McMaster University

- Expected graduation date : **Apr 2021**
- Dean's Honour List
- Cumulative GPA 3.8 / 4.0

PROJECTS

SafeBnB (Hack the North 2018)

- Developed a web app that recommends Airbnb listings in Toronto based on how safe the area is
- Analyzed crimes and Airbnb datasets to derive algorithms for calculating safety index
- Rapid prototyping with **Angular** and **Firebase**

Talky (NWHacks 2018)

1st popular vote out of 144 teams
Best Use of Microsoft Technology

- Built an iOS app that provides real-time feedback on uses' public speech recordings
- Analyzed properties of audio files using **Python** and integrated the app with **Flask backend**
- Helped design a chat-like interface with **Swift**

Microcosm (Hack.init() 2017)

- Built an interactive botany learning tool based on Hololens **mixed reality** implemented by Unity and HoloToolkit API.

EXTRACURRICULAR

The Forge (Innovation Factory))

- Member of Hamilton's **startup incubator** and McMaster's entrepreneurship initiative
- Joined the startup business which received tremendous guidance and mentorship
- Actively attend innovation programs and entrepreneurship training