Darian Zhang

3B Honours Computational Mathematics Joint Statistics

d355zhan@uwaterloo.ca | (416)-454-2049 | |

Work Experience

Dematic - Software Engineer Facilities Emulation   Jan - Apr. 2023
- Resolved **20+** Jira tickets for the 3D facility visualisation and simulation platform built on **Unity3D** including bug fixes, feature development, and test tasks
- Reduced platform **CPU footprint** by 35% by identifying and replacing inefficient method calls and implementations of the **singleton pattern**
- Implemented Regression test suite using **TestRail**

SS&C Technologies Inc. - Full Stack Developer   May - Aug. 2022
- Automated migration process by writing Python scripts that perform **database migration** from **PostgreSQL** to **YugabyteDB** which receives a **JSON** file input
- Load tested Yugabyte databases using Python scripts to create sample CSV data files and insert them to determine optimal performance using the **Ray** Python package for parallelism
- Built a **Java Spring Application** which connects to and performs multiple request testing on databases using **multithreading**

Ontario Ministry of Transportation - Junior Technical Analyst   May - Aug. 2021
- Communicated effectively with employees concerning Registration and Licensing System of Ontario (RLSO) issues to resolve **50+** incidents
- Replicated RLSO issues in UAT environment, used Microsoft **Azure Application Insights** to investigate incidents, and received Azure training via Microsoft Learn

Relevant Projects/Extracurricular Activities

Letterboxd Movie Picker (https://github.com/darianzhang0/Letterboxd-Watchlist-Picker)   May 2023
- Coded a movie watchlist picker to obtain common movies on multiple Letterboxd.com users' watchlists using **BeautifulSoup**
- Different flags allow users to randomly choose a movie from the common movies, save information about the movies in an **HTML file**, and automatically open the file in a browser

Indeed Web Scraper (https://github.com/darianzhang0/JobWebScraper)   Dec. 2021
- Developed and built an automated Web Scraper using the **BeautifulSoup** Python library to obtain daily job postings relating to student developer positions from Indeed.ca
- Algorithmically ranks jobs based on user-provided keywords and utilizes a local **SQL** database to store job information

Unity Western Arcade Game (https://davvoint.itch.io/shootout-hunter)   Aug. 2021
- Designed and coded a western arcade game using **Unity Engine** and **C#**
- Implemented a random character spawner, score, player movement tracking, and multiple game screens
- Attained **over 100 views** and **75 plays** on itch.io

Technical Skills

Languages: Python, C++, C, C#, Java, R, SQL, HTML, CSS, Javascript & Racket

Tools: Linux, Vim, PostgreSQL, YugabyteDB, JetBrains Rider, Visual Studio Code, IntelliJ, Git, Github, Unity, Bash, LaTeX, Azure, Ray, BeautifulSoup, JIRA, Testrail, Postman