# ALLEN ZIFENG AN

4474 Mayflower Drive, Mississauga, Ontario (+1) 416-294-2207 ⋄ anz8@mcmaster.ca

#### **EDUCATION**

# McMaster University

September 2017 - May 2023

Mechatronics Engineering (Software Department), Biomedical Engineering Bachelor of Engineering, Currently in Fourth Year out of Five Year GPA: 3.9

Relevant Courses: Data Structures and Algorithm (SFWRENG 2MD3), Operating Systems (SFWRENG 3SH3), Databases (SFWRENG 3DB3), Software Development (SFWRENG 3K04)

# WORK EXPERIENCE

# Application Developer, CIBC

May 2020 - May 2021

- Being part of the service effectiveness team providing full scale Splunk log analysis solution.
- Developed complex Splunk queries to produce statistical results required from other enterprise teams (Fraud, Performance Team).
- Developed proof-of-concept models using Splunk Machine Learning Toolkit for customer segmentation and page recommendation.
- Optimized queries to produce dashboards, reports and alerts for incidence monitoring and data visualization.

Computer Science and Math Teaching Assistant, McMaster University September 2018 - now

- Being a teaching assistant for: Database, Software Development, Linear Alegbra, Calculus
- Developed unit testing scripts and selenium script to evaluate student's programming assignments and automatically submit the marks to the online school system.
- Conducted exam and midterm reviews in front of 200+ students and provided tailored personal tutoring
- Received acknowledgements from students for the outstanding communication skills and detailed clarification on perplexing and abstract concepts.

#### Summer Research Assistant, McMaster University

May 2019 - August 2019

- Implemented a lane detection algorithm based on hough line transform from Python OpenCV and compiled the software on the Nvidia Jetson TX2 platform.
- Trained a neural network YOLO model in MATLAB through ground truth labelling module to recognize car models. Worked closely with graduate students from the department of computing and software.

#### **PROJECTS**

Personal Website 2020

https://zifengallen.tk/

Website UI Design. Flex Layout Design. Mobile First Principle. Bootstrap. Vanilla Javascript Games. Canvas Animations. Python Django Forum.

### Mock Messenger Web

2020

Self designed and implemented a user system authenticated with JSON Web Tokens. Provided registered users with instant messaging services, and file transferring services. Used NodeJS ExpressJS for backend framework. Wrote SQL to create CRUD APIs for splite3 database. AJAX design for complete separation of frontend and backend services as well as modularity and scalability. React framework was used in the frontend for easier maintenance and development.