ALLEN ZIFENG AN

4474 Mayflower Drive, Mississauga, Ontario

(+1) 647-818-4882 ⋄ anz8@mcmaster.ca

EDUCATION

McMaster University *September 2017 - May 2023*

Mechatronics Engineering (Software Department), Biomedical Engineering   GPA: 3.9

Bachelor of Engineering, Currently in Fourth Year out of Five Year

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 2021 - May 2022*

- 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.

ACTIVITIES

Program Ambassador, McMaster University   *October 2017 - now*
Worked collaboratively with other ambassadors to advertise and promote the integrated biomedical engineering program. Served as the go to person during university open house and interfaced with prospective students and families.

SKILLS

Programming Languages
Proficient: Javascript, Python, HTML, CSS
Intermediate: Java, C/C++, MATLAB, Simulink
Basic: Assembly

Frameworks
NodeJS, ExpressJS, ReactJS, Django, OpenCV, NumPy, Matplotlib

Other
Proficient in Ubuntu/Linux systems, GCP, AWS, Aliyun, Raspberry Pi, Arduino, Nvidia Jetson TX2

Languages
English, Mandarin, Shanghainese

AWARDS AND SCHOLARSHIPS

Google HashCode Coding Challenge   *Feb 2020*
Worldwide Ranking 1000+.

Dean's Honour List ,McMaster University   *May 2019*
Given to degree students in the Faculty having a Cumulative Grade Point Average of 3.50 or higher.

McMaster President's Entrance Scholarship , McMaster University   *September 2017*
Awarded to high school students with an average higher than 95.

Biology Graduation Award , Bronte College   *June 2017*
Awarded by the high school during graduation to one student per subject.

Certificate of Completion , Mississauga   *May 2017*
Mississauga Half Marathon Race 2 hour 10 min.

Certificate of Distinction , Canadian Computing Competition, University of Waterloo   *May 2017*
Ranked top 20 percent in Canada in the Competitive Programming Competition.

HOBBY

Tennis, Cooking, Golf, Chess