

# ZIFENG (ALLEN) AN

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## EDUCATION

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### McMaster University

Mechatronics Engineering (Software Department), Biomedical Engineering  
Bachelor of Engineering, Currently in Final Year out of Five Years

September 2017 - May 2023

GPA: 3.9

## WORK EXPERIENCE

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### Software Engineering Intern, IBM

May 2022 - Aug 2022

- Conducted frontend development with **Typescript** and **React** for IBM Cognos Analytics - a data analytics platform.
- Developed frontend interactive features in a Dockerized environment using IBM React Carbon components. Ensured adaptive rendering and accessibility across different themes and platforms to improve user experience.
- Created unit tests using Enzyme and Jest to increase unit test coverage from 60% to 96%.
- Utilized Jenkins CI/CD for deploying the latest build and investigating pipeline build failures.

### Application Developer Coop, CIBC

May 2021 - May 2022

- Provided large-scale big data Splunk log analysis solution to Incident Management, Alert System, Fraud Detection, Performance Analysis and Certificate Management.
- Developed and optimized complex Splunk queries to produce statistical analysis and data visualizations (dashboards, reports and alerts) to meet the needs from other enterprise teams.
- Implemented proof-of-concept prototypes using **Splunk Machine Learning** Toolkit for customer segmentations and page recommendations to deliver customized targeted promotions.

### Computer Science and Math Teaching Assistant, McMaster University

September 2018 - now

- Courses: Database, Software Design, OOP, Principles of Programming, Discrete Math, Linear Algebra, Calculus
- Developed unit testing scripts and selenium scripts to evaluate 200+ student's programming assignments and automatically submit the marks to the online school system.
- Conducted exam reviews in front of 200+ students and provided tailored private tutoring
- Received acknowledgements from students for outstanding communication skills and detailed clarification on perplexing and abstract concepts.

## PROJECTS

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### Hearing Test Mobile App

2022

- Developed a cross-platform mobile app with Flutter. Served as a pre-screening tool to provide users with 3 hearing tests - pure tone audiometry test, digits in noise test and a custom-designed spatial sound test.
- Implemented a full stack application with Express backend. Designed intuitive data visualization for users' hearing test results and provided assessment reports based on the standard benchmark audio lab results.

### Self Developed Personal Website

2021

- Developed a mobile friendly, client-side-routing SPA using React-Redux with a self designed UI to share a Personal Tech Blog. Implemented vanilla Javascript games and canvas animations in projects.
- Used GitHub Action for automatic build and deployment, SEO for search engine indexing and Google Analytics to monitor user behaviours. Provided login and commenting services from a home hosted server.

## SKILLS

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- JS/TS | Python | Java | C/C++ | Node | Express | Django | PyTorch | Flutter
- English, Mandarin, Shanghainese - All professional proficiency or above