Edward Zhuang

SOFTWARE ENGINEER

☐ (647) 787-4007 | ✉ zhuange@mcmaster.ca | in /edwardzhuang2001

Education

McMaster University   *Sep. 2019 - Apr. 2024*
B.ENG. IN SOFTWARE ENGINEERING (CO-OP)   *Hamilton, ON*
- **GPA**: 3.6/4.0
- **Relevant courses**: Statistics, Databases, Data Mining, Data Structures and Algorithms, Software Development, Large Software Design

Skills

Languages	Python, Java, JavaScript (ES6), HTML, CSS, SQL (Postgres), Bash, MATLAB
Development	Spring Boot, React, Node.js, Bootstrap
Data and ML	pandas, NumPy, Scikit-learn, PyTorch, TensorFlow
Other Technologies	Git, Atlassian, AWS, Jenkins, Linux, Microsoft Excel

Experience

Software Engineer Intern   *May 2022 - Apr. 2023*
NATIONAL BANK OF CANADA   *Toronto, ON*
- Designed and implemented business logic features using **Java** and **Spring Boot** for a securities trading application used by over **40** traders to fulfill frequent business requests
- Developed server-side infrastructure for the migration of the on-premises, monolithic application to an **AWS**-hosted, microservices-style application using **Java** with **Spring Boot**
- Handled operations tasks–communicating with clients, fixing bugs, aggregating **SQL** data, and servicing **Jenkins** pipelines

Web Developer Intern   *May 2021 - Sep. 2021*
ONTARIO MINISTRY OF EDUCATION   *Remote*
- Developed a **JavaScript (ES6)** script with **Node.js** and **Kentico Kontent API** to streamline the Ontario curriculum website structure creation process, reducing execution time by **95%**
- Handled structure creation and content entry in Kentico CMS to move Ontario curricula from PDF to **HTML**, **CSS**, and **JavaScript**

Projects

POST Study Project   *Sep. 2021 - Apr. 2022*
MACHINE LEARNING PROJECT   *McMaster AI Society*
- Applied a **support vector machine (SVM)** with a team to classify potential opioid addicts from patients in the **Pharmaco-genetics of Opioid Substitutions Treatment Response Study (POST)**, working with McMaster's Faculty of Health Sciences
- Leveraged **Scikit-learn** to build a classification model with a true positive rate of **68%**
- Developed **Python** scripts for data cleaning using **pandas**, reducing a noisy and inconsistent data set of **3000+** features to a clean data set with ∼**400**, minimizing effects of overfitting
- Presented results to the **McMaster AI Projects Expo 2022** to a panel of **30+** professionals and students

League of Legends Data Fetcher   *Mar. 2021 - Apr. 2021*
DISCORD BOT   *Personal Project*
- Developed a data-fetching Discord bot for League of Legends players used by a **100+** member server, including commands for fetching and displaying live and player profile statistics within **2** seconds
- Developed backend in **Python** and implemented data fetching via the **Riot Games API**

JavaScript Tetris   *Feb. 2021*
TECHNICAL WORKSHOP   *IEEE McMaster Student Branch*
- Led and prepared a live JavaScript Tetris workshop to an audience of **75+** people
- Implemented gameplay and user interface in **HTML**, **CSS**, and **JavaScript**