Alex Li

Software Developer

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Objective

Second year Computer Science student with strong work ethics, adaptability, and experience working in a fast-paced work environment. Seeking a Software Developer position to develop user-oriented, practical, and scalable software.

Summary of Qualifications

Programming Languages: Java / Python / C / C# / R / JS / TS ***Proficient Languages:*** English / French / Mandarin

Skills: Angular / React.js / Firebase (Cloud Firestore, RTDB, Functions) / .NET / Node / Express / REST / Git / Linux /

Interests: Cloud Services / Network Management / System Administration / CAD & 3D Printing / Robotics

Education

Bachelor of Computer Science - *University of Waterloo, Waterloo, ON*   Sept 2020 - May 2025
- President's Scholarship of Distinction | Linear Algebra, Combinatorics, OOP & Functional & Imperative Software Dev

Work Experience

Software Developer, SaFuture Inc.   May 2021 - August 2021
- Implemented responsive web application pages tailored to the clients' needs using the **Angular** web framework, demonstrating extensive experience working with **TS**, **HTML5**, **CSS**, and **MVC concepts**.
- Established backend business logic using **.NET** and **C#** to handle HTTP requests to and from the Oracle database.
- Communicated proactively with a focus on attention to detail and active listening.

Research Analyst, McMaster INORMUS Clinical Study   April 2021 - September 2021
- Created custom library functions in **R** to process and organize raw clinical data into usable information for research.
- Managed weekly meetings with the data and development teams, facilitating the discussion on new data cleaning procedures, tracking weekly progress, and resolving development roadblocks.
- Demonstrated proficiency in **Git version control** with handling PRs and using the Trunk Based Development model to manage the development process.

Relevant Projects

EEG Racing Simulator, natHACKS Hackathon   July 2021 - August 2021
- Trained an AI in **Python** using EEG data from the brain to steer a car in the racing simulator "rFactor 2".
- Incorporated the **Brain Computer Interface** (BCI) device "Muse 2" to gather EEG data from the brain.
- Data is fed through a **scikit-learn** pipeline to ML classifiers such as *Support Vector Classifier* (SVC), *Random Forest*, and *Multi-layer Perceptrons* (Trained models achieved an accuracy between the range of 92% to 98% on recorded test data).

Personal Website   December 2020 - January 2021
- Designed a responsive personal website with clear, appealing visuals using **HTML**, **CSS**, and **Javascript**.
- Implemented a **REST API** to handle requests to **Cloud Firestore** and **Firebase RTDB** using **Nodejs** and **Express**.
- Combined Google's **Custom Search JSON API** with a custom web scraper to gather inspirational quotes by topic or search relevance, providing a more personalized experience for the user.

React Chess Engine   January 2021 - February 2021
- Created a chess AI web application using **React Native** with **TypeScript** and **JavaScript**.
- Implemented the chess engine using the **Minimax Algorithm** with **Alpha-Beta Pruning**.