# Aly Shariff

Waterloo, ON. Montreal, QC.

## Technical Skills

Languages: Python, JavaScript, HTML/CSS, Racket, SQL, C++ Developer Tools: VS Code, XCode, Android Studio, Expo, Postgres

Technologies/Frameworks: React, React Native, Express, Flask, MongoDB, NodeJS, Tensorflow, Scikit-Learn, Pandas

## Experience

## Software Developer

February - August 2023

DoorHan International

Remote

- Designed a comprehensive software solution encompassing both a web application and mobile app to automate and accelerate the delivery of quotes to clients, which was previously done by hand.
- Developed an admin dashboard on a web interface using React to streamline contractor management for administrators.
- Created a mobile app using React Native with both online and offline capabilities for contractors to generate automatic quotes based on client configurations, featuring compatibility filtering and pricing calculations.
- Developed a NodeJS and Express API for communication between the database, web application, and mobile application, ensuring efficient data management and coordination across the system components.

#### Software and Finance Intern

November 2020 – August 2023

Gestion Immobilière Anwar Inc.

Montreal, QC

- Proposed and developed a desktop application with PvQt5 in Python to automate the processing of a large volume of documents (notices of rent increases to tenants), improving document management efficiency by more than 70%.
- Worked with Microsoft Excel and Sage 50 to process and manage client data, and track monthly company expenditures.

## Co-Founder and CEO

June 2020 - August 2022

AXYAS Tutoring Service

Montreal, QC

- Founded an online tutoring service to help students facing academic difficulties during the COVID pandemic.
- Developed and grew the business over a span of 2 years, successfully generating \$45,000 in sales, while leveraging leadership and communication skills to pitch services, close sales, and coordinate projects within the company.
- Managed a dedicated team of 50 high school tutors who provided educational support to over 100 students, effectively orchestrating their efforts to meet the diverse learning needs of the student body.

#### Projects

## Artificial Sign Language | Python, Tensorflow, SciKit-Learn, Pandas, Mediapipe

2023

- Computer vision research project focused on building a software that translates American Sign Language to English.
- Acquired a comprehensive understanding of machine learning concepts (regression, ANNs, CNNs, etc.) and explored different data manipulation techniques, delving into various models to enhance key metrics like precision and accuracy.
- Project sparked the interest of a professor of the Université de Montréal and was selected to compete at the 2023 Regeneron International Science and Engineering Fair, the biggest science fair in the world.

#### **DriveSense** | Python, OpenCV, Django, React Native, JavaScript

September 2023

- Developed a mobile application employing machine learning to assess the driving quality of individuals on the road, analyzing factors like speed fluctuations and leveraging computer vision for environment visualization.
- Implemented YOLO algorithm and utilized transfer learning techniques to accurately detect and measure objects and distances in the driving environment, and created a Python backend to communicate with the mobile frontend.
- Project was named finalist at Hack The North, Canada's biggest hackathon.

## The Chat App | JavaScript, React, Express, NodeJS, MongoDB

July 2022

- Used the MERN stack to create a full stack real-time chat application on a web interface.
- Implemented authentication and authorization with cookies and JWTs, chat history and real-time communication using sockets.
- Learned how to manage a full stack web project, leading to a comprehensive understanding of the project lifecycle.

## Education

## University of Waterloo