

ALY SHARIFF

Waterloo, ON. / Montreal, QC.

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Qualifications

Languages: English, French

Programming Languages: Python, JavaScript, HTML/CSS, Racket, SQL, C++

Technologies/Frameworks: React.js, React Native, Express, Flask, MongoDB, Node.js, NumPy, Tensorflow, Scikit-Learn, Pandas

Software and Dev Tools: GitHub, Git, REST API, VSCode, LATEX, Excel.

Experience

Software Developer

March 2023 – August 2023

DoorHan International

Remote

- Designed an automated cross-platform quote delivery software that reduced the time delivery times by **80%**.
- Developed an admin dashboard **using React** to streamline contractor management, **increasing sales by 10%**.
- 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 backend with a PostgreSQL database** for cross-platform communication.

Software and Finance Intern

November 2020 – August 2023

Gestion Immobilière Anwar Inc.

Montreal, QC

- Proposed and developed a desktop application with **PyQt5 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 spendings.

Co-Founder and CEO

June 2020 – August 2022

AXYAS Tutoring Service

Montreal, QC

- Generated **\$45,000 in sales** in 2 years, by ensuring excellent service and consistent online advertising (Facebook Ads).
- Managed **50 tutors** who helped over **100 satisfied students**, demonstrating leadership and organizational skills.

Projects (Click on project titles to learn more)

Artificial Sign Language (Science Fair ISEF Project) | *Python, Tensorflow, OpenCV, SciKit-Learn, Mediapipe* 2023

- 1 of 8 chosen on Team Canada for ISEF 2023**, with **\$15,000+** in science fair awards
- Computer vision research project** focused on translating American Sign Language to English with deep learning. Collaboration with **Professor H. Sahraoui at Université de Montréal**.
- Data analysis and web scraping in C++ and Python. Computer Vision with OpenCV, Tensorflow and MediaPipe.
- Developed **LSTM model** that could **translate 25 gestures** with **custom augmented dataset**, while acquiring a comprehensive understanding of machine learning concepts (**ANNs, CNNs, RNNs, transfer learning**).

DriveSense (Hack The North Finalist) | *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 **YOLOv5 algorithm for car plate detection, traffic light colors and road signs**, developed a **custom algorithm to measure distances** in the driving environment, and created a **Django backend** to communicate with the mobile frontend.

XChange | *JavaScript, HTML/CSS, Express, NumPy, Pandas, SciKit-Learn*

January 2023

- Banking exchange transaction visualization tool through a website made with JavaScript, HTML, and CSS. Data analysis through C++. Usage of density estimation (unsupervised learning) for anomaly detection in banking database.

The Chat App | *JavaScript, React, Express, NodeJS, MongoDB, Socket.IO*

July 2022

- Used the **MERN stack** to create a **real-time chat application**. Implemented authentication and authorization with **cookies and JWTs**, **chat history** and **real-time communication using sockets**.

Education

University of Waterloo

2023 – 2028

Bachelor of Computer Science - 3.98 GPA

Waterloo, ON