${f AARIB\ SAMI}$

Canadian Citizen | (647)-853-3518 | asami01@uoguelph.ca | LinkedIn | GitHub | Portfolio Site

EDUCATION

University of Guelph

Guelph, ON

B.S. in Computer Science (Co-op)

2023 - 2027 (Expected)

Minor in Project Management

- **GPA:** 4.00/4.00, Dean's List
- Related Coursework: Algorithms, Operating Systems, Data Structures, Object Oriented Programming, Application of Microcomputers, Intermediate Programming, Discrete Structures I/II

TECHNICAL SKILLS

Programming: Python, Java, C/C#, React.js, HTML/CSS, JavaScript, PyTorch, Flask, Node.js, Firebase, SQL **Developer Tools**: Git, GitHub, GitLab, Unity, Visual Studio Code, PyCharm, Eclipse

Experience

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Incoming Software Developer

May 2025 - Dec 2025

 $Waterloo,\ ON$

PROJECTS

FireGuard AI | Python, PyTorch, Flask, React.js, HTML/CSS

 $Dec\ 2024-Jan\ 2025$

- Trained a PyTorch-based neural network model to predict forest fires, achieving 93% accuracy on test data
- Constructed a front-end using **React** and **Mapbox API**, enabling geolocation search and map navigation
- ullet Integrated the **OpenWeather AP**I to collect up-to-date weather data, improving prediction precision by 15%
- Implemented a Flask backend to seamlessly connect the machine learning model with the React front-end

GryphCourseWatch | Python, Flask, Playwright, HTML/CCS, JavaScript

Jun 2024 – Aug 2024

- Developed a web scraping tool using Python and Playwright to monitor university course availability in real-time, reducing manual registration time by more than 32% across 100+ courses
- Integrated front-end using HTML, JavaScript and Flask to allow users to register for alerts and view courses
- \bullet Marketed project on platforms like LinkedIn and Reddit generating interest from 1,500+ students pre-launch
- Implemented email notifications using SMTP and Mailgun to alert students of available course spots

FaceID Attendance System | Python, OpenCV, Firebase

Jun 2024 – Jul 2024

- Designed an attendance system using Python and OpenCV achieving a facial recognition accuracy of 95%
- Deployed automated attendance logging by detecting faces within 1.75s and updating the database accordingly
- Leveraged Firebase to dynamically update student attendance data, ensuring accurate records for future use
- Built a frontend interface using OpenCV's graphical system to display student data such as name and major

Sign Language Translator | Python, OpenCV, TensorFlow

Jun 2024 – Jul 2024

- Built a live sign language recognition system using **TensorFlow**, achieving **92**% accuracy across **26** gestures
- Utilized OpenCV for efficient video capture and processing, enabling detection within ≈1.53s latency/frame
- Fine-tuned a SSD MobileNet model, boosting recognition performance by over 25%

Animal Identifier $\mid C$

Jan 2024 – Feb 2024

- Developed a k-nearest neighbors (k-NN) algorithm to classify animals achieving 86% accuracy on a test set
- Conducted distance-based calculations using Euclidean Distance, Hamming Distance, and Jaccard Similarity, enhancing classification performance metrics
- Structured a dataset of 100 animals, each with 10 attributes and a class label, to prepare inputs for training and evaluating a k-nearest neighbors model

ACTIVITIES AND LEADERSHIP

Muslim Student Association

Guelph, ON

Events Director

Apr 2024 - Current

• Led the organization in planning religious and educational events achieving regular turnouts of 200+ students

Google Developer Student Club

Guelph, ON

General Member

Sep 2023 - Current

Participated in projects using JS/React.js and Firebase to enhance knowledge of database implementation