#### IREOLUWA ONAMUSI

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Computer Engineering student with hands on experience in software development, IT support, and data pipelines. Proficient in C++, Python, SQL, and React. Eager to contribute to real-world development teams and grow through continuous learning.

#### **EDUCATION**

## **Bachelor of Computer Engineering**

Concordia University, Montreal, Quebec Languages: English, French, Yoruba

Technical skills: C++ | Python | Java | React | SQL

Relevant courses: Data Structures and Algorithm, Web Development

### PERSONAL PROJECTS

# Smart Glove Translator – Android App for Sign Language Recognition- Java, Android Studio

2025

Expected graduation: April 2026

- Built an Android app that translates hand signs into text and speech using real-time sensor data from a smart glove.
- Integrated a machine learning model to classify static gestures sent via Bluetooth from an ESP32-powered glove.
- Implemented text-to-speech output for vocalizing recognized gestures, enhancing accessibility.
- Developed a multi-screen UI (Translation, gestures, settings) allowing users to customize and manage gesture mappings locally.

### Chat Haven - Full-Stack Communication Platform - React, CSS, HTML, JavaScript

2025

- Built a responsive chat app with public and private channels, direct messaging, and real-time online indicators.
- Used React for dynamic UI updates and JavaScript for message handling, user interaction and state management.
- Implemented features like emoji reactions, message quoting, and notification settings to improve UX.
- Added basic moderation functions (e.g., message delete/block) and ensured clean UI design for usability.

### ETL Pipeline for Retail Sales Data – Python, Pandas, SQLite Docker

2024

- Created an automated ETL process to extract raw sales data (CSV), transform it using Pandas, and load it into an SQLite database.
- Containerized the ETL workflow using Docker, ensuring environment consistency and reproducibility.
- Focused on data validation, cleaning and normalization, using real-world big data and analytics tasks.
- Showcased proficiency in python scripting and familiarity with ETL best practices in a modular pipeline.

### Autonomous Hovercraft Design and Implementation – C++, Arduino, Data Processing pipelines.

2024

- Programmed an Arduino based microcontroller to autonomously control movement using C++ logic and sensor inputs.
- Built data processing pipelines to interpret sensor data and trigger real-time motor responses.
- Led risk analysis and sprint planning using basic Agile methods.
- Collaborated with teammates on hardware assembly, testing, and iterative debugging.

# PROFESSIONAL EXPERIENCE

### Government of Alberta - IT support Agent, Montreal, Quebec

March 2024 – June 2025

- Diagnosed and resolved hardware and software issues within computer systems.
- Installed and configured computer hardware, software, and peripherals.
- Performed regular system updates and backups to prevent data loss and security breaches.

#### VOLUNTEER WORK

### **National Society of Black Engineers Concordia**

2023-2025

• Built partnerships with external organizations, promoted diversity through collaboration with university club, and represented NSBE at events to advocate for student empowerment.