

Issa Ahmed

+1-647-990-4772
Toronto, Ontario
issaahmed1@icloud.com
issaahmed.com

EDUCATION

Dual BESC: Mechatronics Engineering & Artificial Intelligence Systems Engineering

Western University | Graduated 2026 | GPA: 3.70/4.00 | Dean's List

- Capstone Project: Autonomous garbage collection and sorting robot using ROS2 for navigation and control, a robotic arm for object pickup and sorting, and computer vision (OpenCV, Roboflow) for real-time classification
- 4th Year Project: Simulated automated wheelchair control using ROS2 and Raspberry Pi for sensor integration, path planning, and real-time decision making

TECHNICAL SKILLS

AI/ML: OpenCV, TensorFlow, PyTorch, Scikit-learn, Roboflow, n8n, RAG, NLP

Programming: Python, SQL, Microsoft VBA, C, MATLAB, RESTful APIs, AWS Lambda

Engineering: ROS2, Raspberry Pi, Arduino, ESP32, Jetson, control systems, thermal analysis

Tools & Platforms: AWS (Lambda, API Gateway), GCP, SAP, Jira

Certifications: Microsoft AI-900 (Azure AI Fundamentals) & SC-900 (Cybersecurity), SolidWorks CSWA & CSWA-S

ENGINEERING EXPERIENCE

AI Solutions Engineer

Scooty Mobility | May 2025 – Present

- Developing an AI-powered, multimodal, transit companion app for the Greater Toronto Area, featuring conversational trip planning and cross-agency routing across TTC, GO Transit, etc...
- Building AI-powered customer service automation using workflow orchestration tools to route support tickets and automate response handling
- Developing RESTful APIs in Python to simulate PRESTO card fare transactions for mobility applications
- Architecting serverless backend using AWS Lambda and API Gateway for scalable, event-driven processing
- Created AI in Finance training curriculum in partnership with Ontario Tech University, designed 5 weeks of learning materials, onboarded 80 participants, and prepared students for Microsoft SC-900 certification

Thermodynamics Engineering Intern

Bombardier Aerospace | Summers 2022 & 2023

- Developed thermal analysis tools using Microsoft VBA to model heat transfer behavior across aircraft surfaces, enabling engineers to evaluate paint color impacts on thermal system performance
- Built automated parameter input system for anti-ice calculations, reducing manual data entry time and generating simulation-ready input files for thermal protection analysis
- Performed flight test data analysis using SQL and Python to extract and validate critical temperature readings for thermal system verification
- Core developer on Global Companion, a finalist-award-winning AI chatbot that dynamically sequences aircraft testing procedures based on part availability and provides instant troubleshooting guidance

Engineering Summer Student

Thurber Engineering | Summers 2020 & 2021

- Conducted geotechnical laboratory testing including soil classification, concrete compression, and rock analysis
- Digitized and organized technical documentation, reports, and engineering drawings