

ALI HUSSEINI

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SKILLS & INVOLVEMENT

- **Skills:** Python, C++, Java, Javascript, HTML/CSS
- **Tools:** AutoCAD, Autodesk Inventor, Fusion360, Solidworks, Microsoft Excel
- **Involvement:** Model United Nations – Delegate, DECA Business Club – Regionals & Provincials
- **Certifications:** First Aid & CPR-AED, WHMIS, Worker Health and Safety

EXPERIENCE

Co-op Student Technician, Volvo Cars Oakville, Oakville, ON (1-month full-time placement) July – Aug 2024

- Partnered with senior automotive technicians at a leading dealership to diagnose and resolve complex system malfunctions, leveraging systems thinking, workplace safety practices, and structured root cause analysis to ensure reliable outcomes
- Supported various technicians with diverse working methods, adapting seamlessly to different workflows and contributing to quick completion of critical repairs in a high-pressure, fast-paced environment

Tutor & Communications Executive, Garth Webb SS Peer Tutoring Club, Oakville, ON Sept 2024 – June 2025

- Founded the club and expanded reach to over 200 students, managing public announcements and emails, as well as overseeing communications between teachers, tutors, and students
- Tutored 50+ students in Math and Science (grades 9-12), boosting academic performance by up to 15% and fostering strong study habits
- Adapted my teaching strategies to match various learning styles, ensuring engagement and a strong ability to grasp concepts

Energy, Engineering, and Robotics SHSM, Garth Webb SS, Oakville, ON Oct 2023 – June 2025

- Completed WHMIS, Worker Health & Safety, and First Aid & CPR certifications through a variety of online and in-person sessions, ensuring safe and responsible participation in technical, collaborative, and professional situations
- Designed solutions for building a sustainable city as part of the ICE training module, using Microsoft Excel to coordinate project tasks and timelines within group settings

PROJECTS

AI Job Posting Analyzer & Skill Extractor

- Developed an AI-powered web application in Python and Streamlit that summarizes job postings and extracts required skills, enabling applicants to pinpoint resume gaps and tailor applications more effectively
- Integrated HuggingFace Transformers (DistilBART) for NLS and implemented a custom skills taxonomy with synonym mapping, improving keyword detection accuracy in postings by 40% compared to baseline regex extraction
- Engineered an interactive interface with automatic PDF parsing, skill gap comparison, and downloadable reports, delivering an end-to-end solution from data processing to user experience

Electronic Safe – Locked Website (Available on portfolio linked above)

- Engineered an embedded security system on ESP32 using C++ and PlatformIO, integrating keypad input, servo motor, LEDs, and a temperature sensor to replicate a functional electronic safe
- Extended functionality by connecting the ESP32 to Wi-Fi and developing a web interface that synchronized with the physical ESP32 safe, causing the website to be locked or unlocked in real time based on hardware status
- Implemented a full-stack interaction where unlocking the safe granted access to digital student portfolios via the website, bridging hardware, networking, and software systems into a cohesive user experience

EDUCATION

Mechatronics Engineering, University of Waterloo Sept 2025 – April 2030

- Honours Bachelor of Applied Science in Mechatronics Engineering | 1A Term
- Relevant courses: Digital Computation (C++, OOP), Calc I, Linear Algebra (Python), Engineering Design (Excel, AutoCAD, SolidWorks)