

Alexander Jando

Hamilton, ON | West Vancouver, BC

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Summary

Mechatronics-focused engineering student at McMaster University with hands-on experience designing, building, and integrating robotic and embedded systems. Strong background in mechanical design, controls, sensors, and hardware-software integration, with leadership experience on multidisciplinary engineering projects.

Education

McMaster University

Bachelor of Engineering (B.Eng.), General Engineering

Focus: Mechatronics, Robotics, Embedded and Mechanical Engineering

Expected 2029

Hamilton, ON

Technical Skills

Programming: Python, C/C++, MATLAB

Embedded Systems: Arduino, Raspberry Pi, Jetson Nano

Controls & Robotics: PID Control, Motor Control, Sensors, Actuators

Computer Vision: OpenCV, NumPy

CAD & Manufacturing: Autodesk Inventor, OnShape, 3D Printing, Laser Cutting

Tools: Git, Linux, Oscilloscopes, Multimeters

Experience

McMaster University

Engineering Project Manager & Software Lead

September 2025 – December 2025

Hamilton, ON

- Led a multidisciplinary engineering team through system planning, design, and final robotic system delivery.
- Managed project scope, timelines, and task allocation across mechanical, electrical, and software subsystems.
- Designed mechanical components in Autodesk Inventor and manufactured parts using 3D printing and laser cutting.
- Developed Python-based control software integrating Raspberry Pi and Arduino motor control systems.

Hypercharge Canada

EV Charger Technician Intern

June 2023 – August 2023

Vancouver, BC

- Assembled, configured, and tested 100+ EV charging units involving embedded firmware and power electronics.
- Diagnosed hardware faults, replaced internal components, and performed electrical checks and quality control.

Projects

FIRA RoboWorld Cup Autonomous Race Car

Team Project

News Interview: nsnews.com/local-news/west-van-high-school-trio-wins-national-robotics-championship-sets-eyes-on-world-stage-8817010

- Designed and built an autonomous line-following race car using Raspberry Pi and Arduino.
- Implemented computer vision edge detection and PID steering control using Python and OpenCV.
- Performed extensive real-world testing and tuning to achieve competition-ready performance.

Q-Arm Order Packing Robot

ENG 1P13 Engineering Design Project

Project Portfolio: notion.so/P-1-Robotic-End-Effector-System-2c2a5473791681db954af45b4c336348

- Designed a custom robotic end effector in Autodesk Inventor for automated object handling.
- Developed control software for pick-and-place motion and validated gripping reliability.

NoNotes – AI Powered Note Taking Platform

Backend Lead

Video demo: youtube.com/watch?v=EBiBeUzb0xY

- Built backend systems for audio processing and AI summarization, demonstrating strong system integration skills.

Personal Engineering Portfolio

Solo

Live: jando.live

- Documented robotics, mechanical, and embedded projects with CAD models, code, and system diagrams.

Awards & Certifications

1st Place FIRA RoboWorld Cup (National) | 2nd Place (International)

1st Place HappyHacks II | CyberTitan Platinum

National Lifeguard | Standard First Aid & CPR C | DELF B2 French

Languages

English (Native) | French (Fluent)