Alexander Jando

Hamilton, ON and West Vancouver, BC
alex@jando.live | +1 (236) 865-5560
https://jando.live | github.com/Alex-Jando | LinkedIn: alex-jando

---

SUMMARY

Engineering student at McMaster University with strong experience in software, robotics, and hardware systems. Proven ability to design, build, and deploy real engineering solutions including AI software, autonomous vehicles, and mechanical systems. Experienced working in high responsibility environments and delivering working technical products.

EDUCATION

McMaster University
Bachelor of Engineering (B.Eng.), General Engineering
Focus: Mechatronics, Computer and Mechanical Engineering
Expected Graduation: 2029

École Sentinel Secondary School
Bilingual Dual Dogwood Diploma

TECHNICAL SKILLS

Programming: Python, C++, Java, JavaScript, MATLAB
Web: HTML, CSS, React, Next.js, Flask
Databases: SQL (SQLite), MongoDB
AI and Computer Vision: NLTK, OpenCV, NumPy
Version Control: Git
Operating Systems: Linux, Windows
Embedded Systems: Arduino, Raspberry Pi, Jetson Nano
CAD: Autodesk Inventor, OnShape
Cloud and Hosting: Oracle Cloud, Cloudflare Tunnel, GitHub Pages

---

EXPERIENCE

Hypercharge Canada
EV Charger Technician Intern
June 2023 – August 2023

- Prepared and configured over 100 EV charging stations for deployment by initializing firmware and registering units on the Hypercharge network
- Disassembled and repaired malfunctioning or uncalibrated chargers by replacing internal hardware components
- Performed hardware testing, electrical checks, and quality control to ensure devices were field ready
- Used hand and power tools including drills and screwdrivers to assemble and service units in a warehouse production environment
- Documented device status and followed strict safety and quality procedures

---

Hollyburn Country Club
Lifeguard and Swim Instructor
August 2024 – June 2025

- Ensured safety of swimmers through active surveillance, emergency response, and risk assessment
- Instructed swimmers of all ages, developing strong communication and leadership skills
- Maintained compliance with safety and operational standards

---

Whistler Blackcomb
CSIA Level 2 Ski Instructor
November 2022 – May 2024

- Delivered technical skiing and mountain safety instruction to individuals and groups
- Assessed performance and adapted lesson plans to student ability
- Worked in high-risk outdoor environments requiring responsibility and clear decision making

---

PROJECTS

NoNotes – AI Powered Note Taking Platform
Hackathon Project | Backend Lead

- Built the backend AI system for an audio to text and note summarization platform used in a 48-hour hackathon
- Developed a Flask API and SQLite database to store, process, and retrieve user notes
- Implemented natural language processing using NLTK to extract and summarize important information from text
- Integrated speech to text processing to convert spoken audio into searchable notes
- Designed system logging and API endpoints to support a full web-based frontend
- Project won first place at HappyHacks II

Video Demo: https://www.youtube.com/watch?v=EBiBeUzb0xY

Skydle – Online Wordle Game for Hypixel Skyblock
Solo Project

- Designed and built a full stack interactive web game using React and JavaScript
- Pulled live game data from an external API to dynamically generate puzzles
- Deployed a production version on GitHub Pages with a public live demo
- Improved on the original concept by adding enhanced logic, UI, and gameplay features

Live demo: https://alex-jando.github.io/Skydle/

PY-RAT – Python Remote Administration Tool
Solo Project

- Designed and built a complete remote administration system in Python
- Created a custom socket-based communication protocol for efficient data transfer
- Implemented live camera streaming using OpenCV and NumPy

- Developed security research features including credential access testing and remote command execution
- Packaged the full application into a distributable executable using PyInstaller

GitHub: https://github.com/Alex-Jando/PY-RAT

FIRA RoboWorld Cup Autonomous Race Car
Team Project | National 1st Place, International 2nd Place

- Designed and built an autonomous line following race car with a teammate
- Programmed Raspberry Pi and Arduino systems using Python and C
- Used a Logitech camera and computer vision edge detection to track road lines in real time
- Implemented a PID controller to adjust steering based on visual input
- Performed extensive physical testing and tuning to achieve reliable race performance

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

Q-Arm Order Packing Robot
Team Project | ENG 1P13 Engineering Design Project

- Designed and modeled a custom robotic end effector in Autodesk Inventor
- Built control software to automate object pickup and placement
- Created mechanical CAD assemblies and tested gripping mechanisms for reliability

Project Site: https://www.notion.so/P-1-Robotic-End-Effector-System-2c2a5473791681db954af45b4c336348?pvs=74

AI Short Story Video Generator
Solo Project

- Built a locally run AI system that generates short form videos from a single prompt

- Automated story generation, image creation, and video rendering into a complete pipeline

Sample Video: https://github.com/Alex-Jando/AIShortStoryVideoMaker/raw/refs/heads/master/examples/sample_video.mp4

HTTP-PyServer
Solo Project

- Created a lightweight Python HTTP server framework focused on simplicity and performance
- Published the package to PyPI for public installation and use

PyPi: https://pypi.org/project/HTTP-PyServer/

Personal Engineering Portfolio
Solo Project

- Designed and built a responsive engineering portfolio using Next.js, HTML, CSS, and JavaScript
- Implemented server-side rendering and SEO to improve load times and search visibility
- Deployed on a Linux server running in Oracle Cloud with Cloudflare Tunnel for secure 24/7 access
- Managed hosting, updates, and version control using Git to maintain a live production site

Live Site: https://jando.live

MyPlate – Nutrition and Macro Planner
Team Project | Awarded Developer of the Year

- Built a mobile nutrition and meal planning application using Java in Android Studio
- Designed features for tracking macronutrients, meals, and daily nutrition goals
- Implemented data storage and retrieval to save user food logs and preferences

- Developed a clean and simple user interface focused on usability and fast data entry

GitHub: https://github.com/Alex-Jando/GOA2023-MyPlate

CERTIFICATIONS

National Lifeguard
Standard First Aid and CPR C
Swim and Lifesaving Instructor
CSIA Level 1 Ski Instructor
CSIA Level 2 Ski Instructor
DELF B2 French Certification

AWARDS

1st Place, HappyHacks II Hackathon
1st Place, FIRA RoboWorld Cup National Autonomous Car Division
2nd Place, FIRA RoboWorld Cup International Autonomous Car Division
CyberTitan Platinum Division
Developer of the Year, GameOfApps

INTERESTS

Robotics, Artificial Intelligence, Mechanical Systems, Coding Competitions, Skiing, Rugby, Gym

---

LANGUAGES

English (Native)
French (Fluent, DELF B2)

REFERENCES

Available upon request