Aleksandar Filipovic

778-239-9302 | AleksandarFilipovic.ece@gmail.com | linkedin.com/in/aleksandar-filipovic1 | Vancouver, British Columbia

Experience

Electrical Engineering Intern May 2025 – July 2025
MCW Consultants LTD *Vancouver, BC*

- Conducted electrical design with Vancouver's YVR Airport, focusing on power distribution schematics and energy-efficient lighting systems for a 28,000 square meter area
- Generated over 15 detailed electrical site plans and single-line diagrams in AutoCAD and Revit, ensuring compliance with Canadian Electrical Code (CEC) standards
- Authored technical specification documents and project submittals for client review
- Collaborated with mechanical and civil engineering teams to integrate power systems into building designs

Mechatronics Sub-Team September 2025 - Ongoing
UBC BAJA, BAJA SAE *Vancouver, BC*

- Designing a real-time CVT temperature monitoring system using infrared sensors to prevent belt failure
- Refactoring CANBus communication protocol to decrease data latency by 15%
- Designed a 4-layer data acquisition PCB in Altium Designer, integrating an STM32 microcontroller

Sales Associate November 2023 – January 2025
Hills of Kerrisdale *Vancouver, BC*

- Delivered personalized customer service and sales support in a high-end retail environment
- Consistently met and surpassed daily sales targets in a fast-paced, performance-driven setting

Projects

Minesweeper Python Project | *Python, Tkinter, OOP* August 2025

- Engineered a Minesweeper clone in Python, developing core game logic, win/lose conditions, and customizable grid sizes using an Object-Oriented Programming (OOP) class-based system
- Utilized the Tkinter library to design and build the complete graphical user interface (GUI)

Arduino Automated Claw | *C, Arduino, Fusion 360* January 2025 – February 2025

- Designed and programmed an Arduino-controlled automated claw using C, implementing precise motor control logic
- Prototyped and iteratively refined the mechanical design using 3D modeling in Fusion 360

Technical Skills

Programming Languages: C, Python, MATLAB
CAD & PCB Design: Altium Designer, Revit, AutoCAD, Solidworks
Hardware & Protocols: STM32, Arduino, CANBus, I2C
Software & Tools: Git, LTspice, MS Office
Lab Equipment: Oscilloscope, Multimeter, Power Supply, Logic Analyzer

Education

University of British Columbia Vancouver, BC
Bachelor of Applied Science - Electrical Engineering *Expected April 2028*

- CGPA: 85.6%
- Relevant Coursework: Integral Calculus (93%), Electrostatics and Magnetism (89%), Mechanics (92%)