

Education

University of Calgary

Expected April 2022

BSc. in Electrical Engineering, Minor in Computer Engineering

- **Relevant Coursework:** Data Structures and Algorithms, Principles of Software Development, Control Systems, Digital Systems Design, Digital Electronics Circuits, Communication Systems and Networks, Embedded Systems, Engineering Ethics

Activities

Schulich Ignite – Student Mentor

Sept. 2019 – Dec. 2019

- Assisted a cohort of 5 students in the fundamentals of **computer programming**
- Encouraged students to develop solutions to various problems, combining object oriented and iterative processes
- Developed a rapport with other mentors and provided feedback to ensure the learning environment promoted

Academic Projects

Handheld Gaming Device

Jan. 2021 – Present

- Used an **Arduino** microcontroller to create a handheld gaming device that can run simple games
- Coded the games using an open source library (Arduboy)
- Tested graphics and peripherals using Arduino library functions
- Demonstrated proper documentation and written communication of project specifications

Audio Device

Jan. 2020 – Apr. 2020

- Developed a **proof of concept** for a machine that created basic beat patterns, focusing on a simple user interface
- Designed 3D CAD model as a prototype
- Designed filter and LED matrix circuits for the layout
- Prepared electrical **load list** for the project

Digital Dashboard

Sept. 2018 – Dec. 2018

- Created a simulation of a car dashboard that responded to simulated vehicle data
- Read Excel files containing vehicle data using file handling functions in Processing 3
- Manipulated dashboard graphics to respond to vehicle data

Technical Skills

Programming	C, C++, Java, Python, JavaScript, MATLAB, VHDL
Embedded Systems	Arduino, Raspberry Pi, PIC
Circuit Design	Quartus, Modelsim, LTSpice, OrCAD PCB
Electronic Tools	Oscilloscope, Multimeter, Function Generator, Soldering
Miscellaneous	Autodesk Fusion 360, Microsoft Excel