# SELIKEM KWADZOVIA

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### SKILLS

#### **Software**

- C and C++
- MATLAB and Simulink
- Python
- SolidWorks
- Sensor Integration
- I2C, SPI, UART

#### Hardware

- Embedded Systems Design
- Board Bring-up
- PCB Design
- Rapid Prototyping
- MSP430
- PIC32 MCUs

# TECHNICAL WORK EXPERIENCE

## **Product Engineer Co-op**

Microchip, Burnaby, BC

September — December 2021

- Completed bring up for Meta-Dx2L characterization board
- Wrote Python scripts to interface with sensors using I<sub>2</sub>C
- Created self-test functions for GPIO expanders, ADC's, sensors
- Debugged customer issues involving SerDes Bit-Error Rate

# **Software Video Compression Co-op**

Intel of Canada Ltd, Vancouver, BC

- Developed Python scripts to streamline data collection
- Completed code cleanup of C++ based SVT-HEVC encoder
- Lead daily visual and quantitative assessments on various encoders
- Provided feedback to developers based on the performance of new features

# ENGINEERING PROJECTS

# **Battery Management System**

January 2021 — August 2021

April — December 2018

Capstone Design Technical Project I

- Four-person project involving mechanical, electrical, and software design
- Battery monitor handling protection, state of charge, and health estimation
- Used embedded C with PIC32MX530F128H
- Designed MCU section of PCB

### Washing Machine Simulator

March — April 2020

Real-Time and Embedded Control Systems

- Physical user interface with PWM controlled motors
- Controlled using TM<sub>4</sub>C<sub>123</sub>GH6PM and embedded C

## **EDUCATION**

Simon Fraser University

**Graduating Spring 2022** • BASc – Mechatronic Systems Engineering