

October 11, 2024

Huawei, Human Resources
Vancouver, British Columbia

Dear Hiring Manager:

I am writing to express my strong interest in the *Mathematical Optimization Software Engineering* Co-op at Huawei. I am a software engineering student at the University of Victoria in British Columbia. I am eager to learn and grow in the field of computer and software engineering, and I believe that this role will help me gain valuable work experience related to my interests and help me acquire a practical understanding in a real-world setting.

Throughout my academic endeavours, I have had the chance to explore and learn about many important concepts in software engineering, such as object-oriented programming, software architecture design, agile methodologies and software testing. My academic and project experiences align well with the requirements of this position:

- **Embedded Systems Design:** I have developed software for various embedded systems, focusing on integrating mechanical and electrical components to perform tasks using user inputs and sensor data. I have designed control logic for tasks such as LED blinking in response to button presses, where I utilized interrupts for real-time applications.
- **C/C++ Programming:** I have experience working with embedded systems primarily in C, especially in low-level memory management and hardware interfacing. I also have experience developing real-time systems using STM32 microcontrollers, where I've worked managing timers as well as GPIO configurations.
- **Sensor Integration and Data Acquisition:** I have experience integrating a variety of sensors, such as pressure and distance sensors, into some of my projects, which helped process real-time data for robotics applications.
- **Hardware-Software Co-design:** I have collaborated with electrical engineers to design and implement embedded systems. My projects often involve configuring external interrupts and implementing efficient interrupt handling for responsive applications.

I am currently available for a **4-month** work term and would be open to the possibility of participating in more than one consecutive terms. Thank you for considering my application. I look forward to the possibility of speaking with you further about this role.

Most Sincerely,



Arfaz Hossain (He/Him)
Software Engineering Student,
University of Victoria