

September 4, 2024

## Microchip Technology Inc

Microsemi (Data Center Solutions)

Burnaby, British Columbia

Dear Hiring Manager:

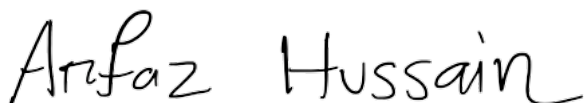
I am writing to express my strong interest in the *Physical Design Engineer* Co-op at Microchip Technology. I am a software engineering student at the University of Victoria in British Columbia. I am eager to learn and grow in the field of computer and software engineering, and I believe that this role 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:

- **Verification and Testing:** I have experience in developing and implementing test cases and testbenches for complex systems, utilizing both software and hardware testing tools. I am proficient in using automated testing tools such as Selenium, Puppeteer, and WebDriverIO, and have familiarity with simulation and verification tools like Cadence NC-Sim and waveform viewers.
- **Programming and Scripting:** I have strong programming skills in Python, TypeScript, JavaScript, and have foundational knowledge in hardware description languages such as Verilog and VHDL. My experience with Unix/Linux environments will aid in developing and maintaining verification testbenches in System Verilog and UVM.
- **Diverse Project Portfolio:** I have completed over 13 development projects, ranging from a 3D Rubik's Cube simulation in C++ to various web applications using React and TypeScript. These projects have honed my ability to handle complex systems and develop solutions to challenging technical problems.
- **Collaboration and Communication:** As an active member of the Engineering Students Society and VikeLabs, I have collaborated with cross-functional teams, mentored peers, and participated in hackathons and coding workshops. These experiences have strengthened my ability to communicate technical concepts clearly and work effectively within a team.

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