September 5th, 2024

Hiring Manager Name (only if known)

Job Title (only if known)

Kardium Inc.

Suite 155 - 8518 Glenlyon Parkway

Burnaby, BC V5J 0B6

**RE: W24 CO-OP MECHANICAL DESIGNER #157767**

Dear Hiring Manager, (or actual hiring manager name if known)

I was immediately drawn to apply to General Fusion’s Experimental Plasma Physics Co-op opportunity after reading that the company is focused on creating a world that has clean, limitless energy. As a UBC Engineering Physics student I am quite keen on utilizing my technical knowledge from this program to hopefully one day be in a position where I can dedicatedly focus on supporting renewable initiatives. So, with a deep-rooted passion for sustainability and engineering, I am eager to make a positive impact in this Co-op opportunity with General Fusion by also utilizing my mathematical problem-solving abilities and large data sets experience.

With prior technical experience working in AMPEL under the mentorship of Dr. John Madden developing, fabricating, and testing flexible capacitive sensors, as well as countless experiences working on engineering team projects, I have become very familiar with the engineering design process. In addition, with experience using oscilloscopes and DMMs for circuit analysis, along with my prior experience in AMPEL’s facilities, I am well qualified to be an immediately productive and knowledgeable member of the team.

In my physics and applied science classes in addition to some personal projects I have learned how to breadboard, prototype and troubleshoot electrical circuits. I have worked with RGB LEDs, switches, capacitors, potentiometers, joysticks, servo motors, photoresistors and ultrasonic distance sensors. Recently, I joined UBC design subteam because I want to develop stronger technical skills in the electrical engineering field. Through my team, I am in the process of learning how to use Altium to design PCBs and optimizing wire configurations in our solar car.

I am a problem solver and highly enjoying finding solutions to challenges I have never faced. This past summer as a Volunteer Student Assistant at I debuted a program that taught high school students to explore engineering through the lens of assistive devices. This program was never run in-person before and I had to adjust the online format so that it was suited to an in-person setting. I was faced with many challenges that forced me to develop creative solutions quickly. In the end, the program was highly successful and the participants received an extremely valuable technical and learning experience.

Thank you very much for taking time to review my application. I am looking forward to the opportunity to highlight my candidacy for this role in greater detail. I can be reached directly at via the UBC Science Co-op office at [interviews@sciencecoop.ubc.ca](mailto:interviews@sciencecoop.ubc.ca) or directly at [youremail@email.com](mailto:youremail@email.com).

Sincerely,

Student Name