

# Kai Elrick

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Blue Robotics  
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Dear Hiring Manager,

I am writing to express my strong interest in the Electronics Design Co-op role at Blue Robotics. As a passionate engineering student-athlete at Western University, I am confident that my technical skills, hands-on experience, and strong work ethic would be a valuable addition to your team.

As a third-year Mechatronic Systems Engineering student, my studies have focused on microelectronics and embedded systems, and how they can be integrated into larger mechanical and electrical designs. During a research internship, I built a low-cost infrared spectrometer to help provide frugal healthcare solutions. Using Fusion 360 Electronics to design the custom PCB, along with a digital micromirror device (DMD), and an algorithm developed by the lab, I created a working spectrometer. The unique design allowed for the replacement of expensive sensor arrays with an inexpensive silicon photodiode sensor.

During my internship at Fluidesign Composites, I designed tooling that significantly improved production efficiency and took new product ideas from design to production. Working in a smaller company gave me the opportunity to manage projects, collaborate with technicians and machinists, and improve organizational efficiency.

In addition to my technical background, my commitment to the sport of rowing at the collegiate level has honed my discipline, time management, and teamwork abilities. I have competed for Western University and Team Alberta, earning medals at provincial, national, and international regattas. This experience has taught me how to balance academic, professional, and extracurricular commitments while excelling in each.

As an avid scuba diver and outdoors lover, I am eager to bring this same dedication and determination to Blue Robotics. I look forward to the opportunity to contribute to your team and discuss how my skills align with the needs of your organization.

Thank you for your time and consideration.

Sincerely,

Kai Elrick