

Kai Elrick

Calgary, AB - London, ON
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EDUCATION

Western University <i>BESc Mechatronic Systems Engineering</i>	London, Ontario 2022 – Present
Webber Academy <i>Highschool Diploma</i>	Calgary, Alberta 2019 – 2022

PROFESSIONAL EXPERIENCE

Fluidesign Composites Inc. <i>Product Design & Process Improvement Engineering</i>	London, Ontario Summer 2024
<ul style="list-style-type: none">Designed and prototyped new products and product improvements such as a new steering setup, a forged carbon fiber fin and mold system, and a dynamic oarlock assembly.Saved hours of labor per unit by designing and producing drilling fixtures which improved repeatability of drilling process and allowed holes to be drilled before clear coating, improving product quality.Created project report and SOP templates and implemented them as a company standard.Reverse engineered parts to establish a company database of production and R&D part drawings.	
Translational Biophotonics Lab <i>Researcher, Western University</i>	London, Ontario Summer 2023
<ul style="list-style-type: none">Designed and built a prototype low-cost near-infrared spectrometer using compressive sensing.Responsible for taking project from start to completion individually.Self-taught new skills such as PCB design (Fusion 360, Voltera), spectrometry techniques, and Arduino programming and implementation.	
Team Panorama Ski Club <i>Ski Racing Coach</i>	Invermere, British Columbia Nov 2021 – Apr 2022 Nov 2020 – Apr 2021
<ul style="list-style-type: none">Responsible for developing young athletes, including fundamental skiing and racing technique, sportsmanship, and training mindset.Worked ~ 20 hours per week while maintaining high grades, playing varsity sports, and volunteering.Recognized for leadership, maturity, and reliability.	

SKILLS

- Programming: C, C++, Java, Python, HTML/CSS, JavaScript, Arduino, Matlab, Git
- CAD: SolidWorks (CSWA), Fusion360 Electronics Design, MicroCap, Quartus
- FEA: SolidWorks Simulation, ANSYS Workbench (Static Structural, ACP)
- Strong written and verbal communication

ACHIEVEMENTS & ACTIVITIES

- Team Alberta Rowing (2024)
- Varsity Rowing Team, Western University (2022 – 2024)
- Frugal Biomedical Innovation Research Award (NSERC USRA, 2023)
- Dean's List, Western Engineering (2023)
- AP Scholar with Distinction (2021 – 2022)