Benjamin Lee

(778) 233-2326 • BenL25846@gmail.com • [LinkedIn](#) • [Portfolio](#)

EDUCATION

University of British Columbia - BASc Mechanical Engineering   Apr 2026
Mech Eng. Undergraduate Society Grade Representative
Relevant coursework: Mechanics of Materials, Dynamic Systems and Vibrations, Fluid Mechanics, Electrical Circuits, Material Science, Thermodynamics, Heat Transfer, Computational Methods

EXPERIENCE

Kardium Inc., Burnaby, BC
Manufacturing Engineer Intern   May 2024 – Sept 2024
- Designed and introduced a new hydrophilic dip coating cleaning process, overseeing the design and qualification to decrease the current process time by 75%.
- Assembled mechanical/electrical assemblies for facility expansion, demonstrating proficiency in understanding mechanical drawings, solid models/assemblies, and electrical schematics.
- Conducted time studies on the manufacturing line, analyzing and optimizing process efficiency to meet ramping production targets.

Escape Trailer Industries, Chilliwack BC
Manufacturing Engineer Intern   May 2023 - Dec 2023
- Coordinated prototype builds with CAD software (OnShape) and oversaw the transition to full-scale production for the new Escape 23 product line.
- Implemented Lean Manufacturing principles and introduced CNC manufacturing methods, reducing production cycle time by 60%.
- Utilized Six Sigma methodologies and Root Cause Analysis to reduce nonconformance by 40%.

UBC Uncrewed Aircraft Systems Design Team, Vancouver, BC
Mechanical Payload Member   Sep 2022 - Present
- Designed and conducted FEA analysis in SolidWorks/OnShape, reducing aircraft fuselage internal structure weight by 20%.
- Manufactured fuselage exterior shell and layup mold, performing carbon fiber layups to reduce exterior weight by 30%.
- Executed CFD and model wind tunnel analysis, optimizing flight performance characteristics by 12%.
- Led onboarding and training sessions for new and returning members on OnShape CAD software.
- Led fabrication and rapid prototyping efforts using 3D printing, laser cutting, and waterjet cutting.
- Collaborated with multidisciplinary teams to ensure the seamless integration of mechanical components into autonomous systems.

PROJECTS

Bipedal Robot (Work in Progess)
- Designing an Arduino-controlled two-legged robot that mimics the human walking pattern.

Titan Endurance Orbiter
- Designed an electro-mechanical system that launches an Arduino-integrated catapult on wheels at a controlled velocity, propelling a sphere towards a funnel.

SKILLS & INTERESTS

Fabrication: Lathe, Mill, CNC Router, Laser Cutter, Waterjet Cutter, 3D Printing (FDM/Resin), Laser Welding
Software: SolidWorks, OnShape, MATLAB, Arduino, Python
Interests: Robotics, Mechanical Product Design, Sustainable Technologies