

OBJECTIVES & SKILLS

Analytical, adaptable, and detail-oriented engineering student looking to gain experience and expertise in the workplace.

- Strong knowledge in CAD softwares such as SolidWorks, AutoCAD
 - Experience with C++, Arduino, HTML, CSS, JavaScript
 - Well-versed with orthographic drawings and GD&T
 - Collaborative and creative team player who is enthusiastic to learn
 - Exceptional problem-solving and analytical skills
-

EDUCATION

University of Waterloo, Waterloo, Ontario

September 2023- Present

- Working towards a degree in Bachelor of Applied Science in Mechanical Engineering (Co-op)
 - Recipient of University of Waterloo President's Scholarship
-

PROJECTS

Automatic Dog Feeder

- Designed and built an automatic dog feeder capable of dispensing food at up to two programmable times.
- Programmed the system using Arduino, integrating stepper motors, an RTC module, and an LCD display into a cohesive and reliable circuit.
- Engineered and 3D printed custom components to develop a precision threaded dispensing mechanism for accurate and consistent feeding.

Toy Crossbow

- Designed, sourced materials, and prototyped a functional toy crossbow
- Used rapid prototyping (3D printing, laser cutting) with custom CAD parts
- Experience with machining tools (lathes, bandsaws)

GridArt Robot

- Developed a robot that translates 2D drawings into tactile tile mosaics through color detection and tile placement.
- Designed a 3-axis mechanical system with motors, threads, and 3D printed parts for precise movement.
- Programmed system architecture in RobotC, emphasizing modular design, task efficiency, and error handling.

Solidworks Design

- Designed a variety of projects inspired by Star Wars including a lightsaber, TIE fighter, and Jango Fett helmet keychain
 - Created a 3D model of a butterfly knife through Solidworks, utilizing advanced mating tools to assemble model and restrict movement appropriately
-

EXPERIENCE

CLEAResult Building Science Specialist, Toronto, Ontario

Jan 2025 - April 2025

Evaluated building performance and identified opportunities to reduce energy consumption and improve efficiency. Contributed to the Home Winterproofing Program and Energy Affordability Program, enhancing energy efficiency and supporting low-income communities through improving weatherization, HVAC, and home appliances. Conducted energy assessments of building systems for social housing projects that reduced utility costs while improving overall sustainability.

Hines Building Systems Intern, Toronto, Ontario

May 2024- August 2024

Assisted with daily operations and maintenance of building systems (plumbing, electrical, mechanical, BAS system), ensuring optimal performance and compliance with safety standards. Learned the workings of and interacted with HVAC systems such as the air, chiller, and heating. Used Excel to compile and analyze utility usage in the building and contributed to energy management initiatives to implement sustainability practices, reducing costs and environmental impact.