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++ and ROBOTC
- Well-versed with orthographic drawings and GD&T
- Collaborative and creative team player who is enthusiastic to learn
- Exceptional problem-solving and analytical skills

PROJECTS

Mechanical Design

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)
- Exhibited exceptional group communication and collaborative skills
- Recorded the 6-week-long design process through a detailed and analytical lab report

GridArt Robot

- Developed a robot that translates 2D drawings into tactile tile mosaics, using colour detection, tile selection, and tile placement
- Designed a robust mechanical system using motors, threads, and precise 3D printed components, ensuring accurate movement in three directions
- Created conceptual and system architecture using RobotC, focusing on efficient task flow, modular functionality, and error handling

EXPERIENCE

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.

Diaz Law Co-op Student, Markham, Ontario

February 2023- June 2023

Enhanced analytical skills through a four month placement in a law firm. Assembled legal documents such as wills and transfers of ownership. Became well versed in a professional setting and gained working knowledge on Word and Excel.

SC Sports Academy, Markham Ontario

October 2022- August 2023

Coached soccer to young children. Instructed and motivated children in a constructive manner to be familiar with the rules and foundation of the game with appropriate drills and games. Effectively communicated with children by appropriately modifying verbal tone and vocabulary for the specific audience.

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