



Ayman Marzuq Zaman

zaman.aymanm@gmail.com

+1 (639) 916-2302

Toronto, CA, M5S 2H8

[Linkedin](#)

Professional Summary

Mechanical Engineering student at the University of Toronto with a minor in Robotics & Mechatronics. Certified in SolidWorks (CSWA) with hands-on machining experience (30+ hours using lathes, mills, and shop tools) and proven leadership in team-based design projects, including CNC router development and UTFSAE. Skilled in CAD modelling, simulation, and project management, with strong interest in applying these capabilities to robotics, aerospace, and advanced manufacturing.

Skills

TECHNICAL SKILLS

- CAD & Simulation: SolidWorks (CSWA), ANSYS, MATLAB
- Programming: Python, C
- Machining & Fabrication: Lathes, mills, 3D Printing
- Engineering Tools: GanttProject, Engineering Drawings

CORE COMPETENCIES

- Project Management & Leadership
- Problem Solving & Critical Thinking
- Collaboration & Communication
- Industrial Safety (WHMIS Certified)

Education

UNIVERSITY OF TORONTO, CANADA

Bachelor of Applied Science (BASc), 2028 (*expected*)

Mechanical Engineering + PEY Co-op, Faculty of Applied Science and Engineering

Minor: Robotics & Mechatronics, Engineering Business

Relevant courses: *Python Programming, Mechanical Engineering Design, Circuits, Material Science, Manufacturing Engineering, Thermodynamics*

Experience

MIE MACHINE SHOP - MC78

Machine Shop Assistant, University of Toronto, 2025

- Assisted with machining operations using CNC machines, lathes, mills, saws, and waterjet cutters.
- Designed and assembled a crane with hoist to transport heavy lathe chucks.
- Supported equipment repairs, gaining insight into internal mechanisms and operating principles.

UT FORMULA RACING TEAM: AERODYNAMIC TEAM

Team Member, University of Toronto, 2024

- Designed and modelled a rear wing mount for the UT25 rear wings using SolidWorks.
- Performed surface optimization using ANSYS to increase drag reduction and downforce.

MECHANICAL ENGINEERING DESIGN: CNC ROUTER

Team Leader, University of Toronto, 2024

- Led a team of four to design and develop a functional CNC router model in SolidWorks.
- Developed the final design and validated key choices through mechanical, material, and cost analyses, ensuring alignment with project requirements.
- Spearheaded the CAD modelling process in SolidWorks, optimizing for performance and feasibility.

ENGINEERING STRATEGIES AND PRACTICES II: EWB WALKABLE CITIES

Project Manager, University of Toronto, 2024

- Contributed to enhancing the walkability and accessibility of the Bahen-Galbraith crosswalk.
- As Project Manager, used Gantt charts to track milestones, prepared detailed status reports.
- Conducted design validation to ensure feasibility and effectiveness, and presented project to stakeholders.

ENGINEERING STRATEGIES AND PRACTICES I: HART HOUSE NAVIGATION SOLUTION

Project Manager, University of Toronto, 2023

- Contributed to the development and implementation of a novel navigation system, HartNav.
- Conceptualized the final design through the development of Problem Statement (PR) and Conceptual Design Specification (CDS).
- As Project Manager, scheduled meetings, assigned tasks, and allocated weekly task.

References

RYAN MENDELL

Machine Shop Manager, MIE Machine Shop - MC78

Email: ryan.mendell@utoronto.ca

Tel: 416-978-6008

Office: 5 King's College Road, Room MC78, University of Toronto