

Aigne McGeady-Bruce

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WORK EXPERIENCE

Steenhof Mining Services

Montreal, QC

Mechanical Designer and Junior Project Manager

January 2025 - Present

- Steenhof Mining Services is a mining engineering and EPCM firm specializing in northern operations.
- Lead development of project management tools and customize them for clients needs.
- Provide technical oversight and project management for multiple clients across several projects.
- Expected to switch between tasks efficiently in response to rapidly changing priorities.

Husky Technologies

Bolton, ON

Development Designer, PET Molds

May 2022 – August 2023

- Husky is a global leader in injection molding systems, primarily for the packaging industry.
- Led the design of a pressure and temperature instrumentation retrofit in a high performance mold.
- Actively participated in concept generation and design reviews, contributed to detailed design documentation, and developed a strong understanding of modelling and drafting in Siemens NX.

EDUCATION

University of Toronto

Toronto, ON

BASc in Mechanical Engineering

Graduated: April 2024

- Academics: 3.84 cumulative GPA, Dean's Honor List in all semesters.
- Course Focus: Mechatronics and sustainable energy.
- Teamwork: Collaborated on numerous group projects, growing skills in CAD modeling (SolidWorks), mechanical design, and embedded systems design.

PROJECTS (see website above for further details)

Cyclist Anti-Dooring System | University Capstone Project

September 2023 – August 2024

- Technical lead for a computer vision based system to prevent cyclist collisions with parked car doors.
- Designed and 3D printed a servo-actuated locking mechanism, controlled with an Arduino microcontroller.
- Successfully integrated all systems into a scrap car door and held a public prototype demonstration.

Human Interface Device Glove | Personal Project

October 2021 – Present

- Developed a glove prototype that translates finger movement and hand attitude to keystrokes.
- Optimized the design by combining features to reduce bulkiness and improve ergonomics.

SKILLS AND INTERESTS

- Languages: English, French (enrolled in francization).
- Software: Solidworks (5 years), Siemens NX, Ansys, MS Suite, Matlab, Blender.
- Design: Geometric Dimensioning & Tolerancing, Design for Manufacturing, concept generation, drafting.
- Prototyping: FDM 3D printing, metal work (lathe, mill, drill press), circuit prototyping, soldering.
- Programming: Python, VBA, Arduino, C/C++, HTML, CSS, Javascript, Lua, go, Linux shell.
- Interests: science, robotics, 3D printing, home servers, philosophy, hockey, weight training.