

Ryan Hughes

Bachelor of Mechanical Engineering



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Education

Sep 2019 – Apr 2025

Bachelor of Mechanical Engineering

Completed Dalhousie University's Engineering Diploma with a 3.55 GPA, and graduated with a Bachelor in Mechanical Engineering with a GPA of 3.14, in the Co-Operative Education Program.

Work Experience

Sep 2025 – Jan 2026

Canadian Pipe & Pump Supply – Stock Purchaser

Independently oversaw and managed purchasing of over 4,000 stock items across four branches throughout Ontario, developing purchase strategies, conducting sales reviews, and managing supplier relations, including freight.

Participated in business planning meetings, sharing my analysis of stock sales and revenue to optimize our business strategy.

Sep 2024 – Sep 2025

Outlier Inc. – AI Prompt Engineer and Nontechnical QA Tester

Worked independently to train AI software to perform a variety of tasks, including mathematics, physics, and ability to synthesize information from multimedia inputs, testing quality of the models' outputs.

May 2024 – Aug 2024

SuperNOVA – Engineering Team Leader

Delivered educational workshops at schools across Nova Scotia.

Created a budgeting plan to facilitate the purchase of materials used to deliver 12 weeks worth of camp sessions across an eight-week period.

Assisted in the delivery of the ATLAS Program, an accredited high-school level educational program teaching the fundamentals of CubeSat design, working in partnership with Galaxia Mission Systems and the Dalhousie Space Systems Lab.

Delivered eight weeks of educational STEM focused summer camp sessions for children aged 6 to 15, with a focus on diversity, equity, and inclusion.

Apr 2023 – Jul 2023

Delta Learning Centre - Tutor

Tutored students in high school level physics and mathematics in a remote setting.

May 2022 – Aug 2022

STEMWorld Educational Services – STEM Software Developer Intern

Managed a group of students developing educational games, from conceptual stages to finalization.

Oversaw and participated in planning meetings to review QA requirements to be met and assign this work according to coworkers' strengths.

Generated documentation to communicate technical specifications and platform requirements of each project, setting technical testing goals.

Created two educational game concepts from scratch, both of which were chosen to be built and released on Apple and Android App stores.

Sep 2021 – Dec 2021

Carmichael Engineering – Engineering Intern

Experience creating closeout documents for completed jobs, visited sites to verify that HVAC work was done to completion, and took photos for the documentation.

Created safety programs and binders specific to projects.

Experience assisting project managers with pricing, sourcing equipment, and general logistics for various HVAC projects.

Prepared weekly Work in Progress reports, summarizing the state of numerous in-progress jobs, for use in weekly meetings and to aid in general organization.

Experience setting up sensors at a customer's site, gathering and analyzing temperature data and producing reports to recommend HVAC upgrades.

Academic Project Experience

Sep 2023 – Jan 2024

Dalhousie University – Capstone Project – Cold Gas Thruster to Deorbit a Satellite

Experience working in a group of four students to create a cold gas thruster to be used to deorbit Galaxia's MANTIS project, from concept generation through prototyping stages to finalization.

Jan 2025 – Apr 2025

Dalhousie University – Mechatronics Project – Self-Balancing Robot

Wrote code for a self-balancing robot such that it could navigate and follow a series of magnetic strips before automatically stopping a set distance from an obstacle in front of it.

Relevant Skills

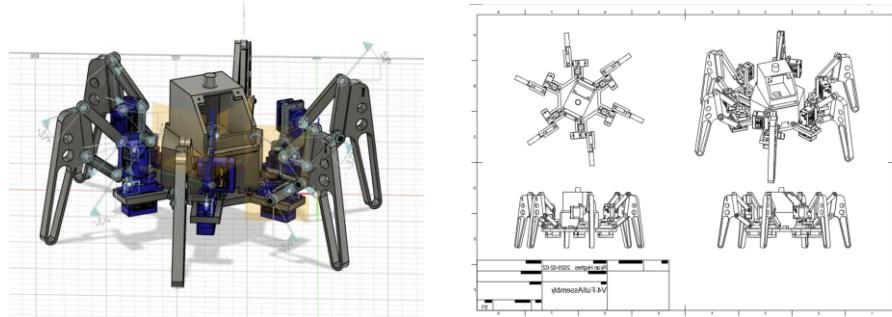
Project Management Experience
Web Design and Development
Strong Problem-Solving Skills
Visual Studio
Experience in an Office Setting
COMSOL Multiphysics
3D Printing (FDM, SLA)
Education
Autodesk Fusion
Quality Assurance Reviews

SolidWorks
Microsoft Office Suite
Adobe Photoshop
Blender
Customer Service
Small Scale Arduino Projects
Robotics
Small Business Ownership
TinkerCAD
Jira + AIO for Progress Tracking and Testing

Personal Projects

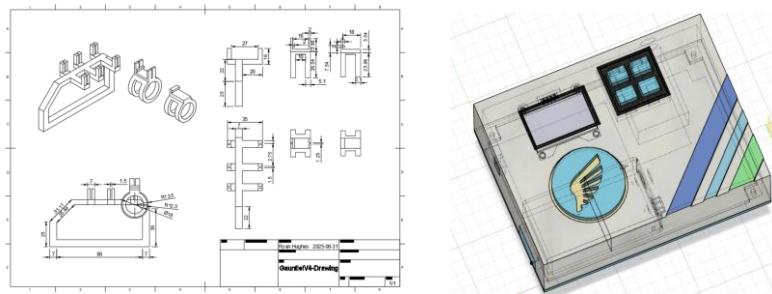
Robotics

I continuously work on creating small-scale Arduino-powered robotics projects, from concept stages, through model generation, programming, and associated construction, including QA processes and task management via Jira and AIO.



3D Printing and Modelling

I generate and print custom 3D models in Blender, Autodesk Fusion, and TinkerCAD, including post-processing treatments.



Small Business – Red Crane Dice

I am the sole owner of a small business selling custom-made and luxury class *Dungeons and Dragons* dice sets.



Website Design and Development

I continuously work on designing and programming fully functional websites in Visual Studio, including a personal site for my own business, primarily in HTML and CSS languages.

A full portfolio of my works is available upon request.