

Ethan Huber

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Technical Skills

Programming Languages: C, Java, Go, C#, JavaScript, HTML/CSS, VHDL

Tools and Frameworks: Git/Github, IntelliJ, VSCode, Arduino, STM32, FPGA, Linux/Unix, Docker, SQLite

Design and Planning Tools: OnShape, Fusion 360, KiCad, Solidworks, AutoCAD, Xilinx ISE

Personal Projects

Filedex - Semantic file search engine // Jul 2025 – Sep 2025

github.com/zushiEdu/filedex [🔗](#)

- Developed a CLI-based semantic file tagging tool in Go with SQLite, using local LLMs via Ollama for tag generation and relevant file search
- Implemented breadth-first search to traverse the tag graph for relevant matches
- Optimized LLM prompt accuracy through iterative testing and manual evaluation

Circuit Layout Creator // Apr 2023 – Jul 2023

github.com/zushiEdu/circuit-layout-creator [🔗](#)

- Developed a web-based circuit layout editor used by peers to visualize and share perforated board designs
- Integrated user feedback from 10+ testers to improve UI and add features

Education

Bachelor of Engineering, Computer Engineering (Co-op)

Sept 2024 – May 2029 (Expected)

University of Guelph; GPA: 3.7

Guelph, Ontario

- Maintaining an 86% average, Dean's Honors List: Winter 2025, Fall 2025
- Relevant courses: Data Structures and Algorithms (98%), Engineering Analysis (98%), Object Oriented Programming for Engineers (96%)

Key academic projects:

- Gryphon Management - University Management System (Feb 2025 - Apr 2025):
 - Led UI development for a Java Swing university management system built in IntelliJ
 - Implemented Git version control workflows to manage contributions across a 5-member team

Technical Extra-Curricular Experience

Electrical Team Member

Sept 2025 – Present

University of Guelph Robotics Team

Guelph, Ontario

- Designed and routed the rover's power distribution board in KiCad, optimizing trace sizing, connector placement, and converter mounting
- Created safety documentation for the power distribution board

Frame Team Member

Sept 2024 – Present

Gryphon Racing

Guelph, Ontario

- Designed motor controller mounts in SolidWorks and performed finite element analysis to optimize structural strength across design variants
- Created 8 3D-printed jigs to improve fabrication accuracy and assembly efficiency
- Modeled mounting tabs and front body panel components to support subsystem integration and assembly efficiency

Vice President

Sept 2022 – Jun 2024

Huron Heights Secondary School Robotics Club

Kitchener, Ontario

- Managed parts research, purchasing and inventory for the club
- Mentored students and delivered presentations on design and safety
- Developed a battle-bot rule book and Arduino battle-bot inspired by Tombstone ([OnShape CAD File](#) [🔗](#))

Work Experience

Process Control Team Member

May 2025 – Present

Toyota Motor Manufacturing Canada

Cambridge, Ontario

- Ensure timely movement of vehicles off the final assembly line, maintaining efficient workflows and on-time completion
- Caught 19 potential defects during vehicle shipping preparation (manual installation and label application) demonstrating exceptional attention to detail