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EDUCATION

University of Rochester

B.S., Mechanical Engineering; Minor, Electrical Engineering Class of 2029

Relevant Coursework: Engineering Dynamics, Engineering Statics, Intro to Aerospace, Physics Mechanics

- Dean's List: Fall 2025 Semester, Spring 2026 Semester

SKILLS

Electrical: PCB Layout & Design (KiCad), CAN Bus, STM32, Teensy, analog & digital circuit design, soldering
CAD: Siemens Designcenter (NX), Fusion 360, Onshape
Manufacturing: Lathe, Mill, 3D Printing, Laser Cutting, Hand Tools
Programming: C++, Python, MATLAB, C#, ROS / ROS2

EXPERIENCE

Aurora Innovation, Pittsburgh, PA – *Vehicle Integration Test & Evaluation Intern* June 2026 - August 2026

- Validated on-track test results and updated/created 30+ test plans for the release of Aurora Driver 2.0
- Built internal tools to streamline post-test analysis, saving the team 20+ hours per testing cycle
- Moved a subset of track tests to an offline sim environment to reduce on-track testing burden

University of Rochester Baja SAE, Rochester, NY – *Electronics & Data Acquisition Lead* May 2026 - Present

- Developing a modular **CAN Bus** data acquisition system on custom **STM32** hardware, built for an automotive environment with IP67 enclosures
- Designed and manufactured custom steering wheel in **NX**, with a 4.3" live-data display and a quick release; Performed **Finite Element Analysis** on wheel to ensure FOS > 1.5
- Set up and helped lead testing with a Michigan Scientific Wheel Force Transducer to measure wheel loads over obstacles, verified with four shock-mounted linear potentiometers

General Member September 2025 – May 2026

- Took a CVT data acquisition system (**Teensy 4.1, C++**) from breadboard to a custom **KiCad** PCB over three design iterations; ran 2+ hours collecting data in wet, high vibration conditions
- Built **MATLAB** tools to process telemetry and optimize the transmission shift curve, cutting 100m acceleration time by 0.200 s

Carnegie Mellon Biorobotics Lab, Pittsburgh, PA – *Robotics Research Intern* June 2025 - August 2025

- Integrated a third-party gripper into IK motion planning software using **Python** and **ROS**

Winchester Engineering Club, Pittsburgh, PA – *Club Leader* January 2024 – May 2025

- Led launch of rocket reaching 1,500 feet apogee at Mach 0.6
- Calculated aerodynamic forces on the rocket for stability
- Designed the fin can and nose cone in **Fusion360** and fabricated components via **3D printing**
- Designed and wired a fail-safe rocket launch controller and built a portable launch pad

Self-Balancing Inverted Pendulum Project, Pittsburgh, PA – *STEM Symposium* April 2025 - May 2025

- Designed self-balancing pendulum in **Fusion360** and implemented a **C++** PID control algorithm to balance it