# Matthew Wilkins

## Objective

Obtain a co-op position that will utilize Mechanical or Manufacturing Engineering skills available from late January to August 2026.

## Education

**Rochester Institute of Technology,** Rochester, New York
Mechatronics Engineering Technology
Bachelor of Science (Expected May 2028)
GPA: 3.27

## Skills

**Computer:** Autodesk Fusion 360, SolidWorks, Multisim, MATLAB,
Microsoft Word/Excel/PowerPoint, Optical Comparator Measurement
**Machine Fabrication:** Tormach CNC Mill, Bridgeport Vertical Mill, Lathe, and 3D Printing

## Courses

**Current:** Mechanics for Mechatronics, Foundations of Metals/Characterizations Lab
**Completed:** Machine Tools Lab, Manufacturing Processes, Circuits 1, Engineering Communication and Tolerancing, Introduction to Digital and Micro Systems, Electronic Devices

## Projects

**Hatteras 85 Yacht Engine Maintenance and Bridge Restoration** **(Summer 2025 - Present)**
Maintained two CAT 3412 Twin Turbo Diesel Engines and Replaced the Starboard Engine's Left Bank Turbocharger. Rewired the Bridge's Electronics and Navigation Systems for Compatibility with a UPS.

**Bits 'n Bytes** **(2024 - Present)**
Collaboration to make an AI-Powered Smart Store. Designed and crafted a wooden cabinet housing electronics and store items. Wired and routed electronics. 3D modeled and printed camera and door components.

**Air Engine** **(Spring 2023 - Fall 2024**)
3D modeled an air engine using Geometric Dimensioning and Tolerancing (GD&T) in SolidWorks, and later manufactured in aluminum and steel on a lathe/mill.

**Aerial Search and Rescue Modular Thermal Payload** **(Fall 2022 - Spring 2024)**
Designed and Prototyped a Quick-Release Custom-Stabilized Thermal Detection Payload using TensorFlow computer vision with modular capabilities to be mounted beneath a mid-to-large drone. Payload expansion includes drop kits and flood light support for fast-action medical and shelter supplies.

**Porsche 986 Boxster S 550 Spyder Restoration** **(Summer 2021)**
Restored Internal and External Aesthetics and Mechanical Components of a 2004 Porsche 986 Boxster S 550 Spyder Anniversary Edition, including: IMS Bearing, Belts, Bushings, and Internal Touch Points using Sourced Parts and 3D Printing.

## Experience

**Split Second Shutter**, MD
Photographer/Videographer **(2017 – Present)**
Photographs and edits sports, weddings, graduations, and other events.
Produces and edits sports, weddings, graduations, and other event films.

**Wilkins Automotive**, Glen Burnie, MD
Express Service Mechanic, Sales, Marketing **(Summers 2018 – 2023)**
Serviced GMC, Buick, and Subaru Vehicles. Produced media for point of view driving/reviews and photography for social media and sales homepage.

## Activities

**Computer Science House**, RIT
Financial Treasurer on Executive Board **(Fall 2025 - Present)**
Oversaw all Budgeting, Spending, and Financial Documentation for a Special Interest Housing Community, ensuring Fiscal Responsibility and Accurate Spending.

3D Printer Administrator Director **(Fall 2023 - Present)**
Maintain 3D printers, lubricate and clean components, rebuild mechanical and gantry systems, perform presentations/seminars on operation and safe use. perform presentations/seminars on 3D design and modeling.

**First Tech Challenge: First Robotics**
Co-lead Robot Designer/Engineer **(Fall 2019 - Spring 2023)**
Co-led design team for FTC team 3886. Designed/3D modeled robot components to be manufactured, built, and tested for prototyping and final competition of a robot.

## Interests

Robotics, Tinkering, Electronic/Automotive Maintenance/Modding, Drone Design and Flight, Photography/Video/Cinematography Creation and Editing, Enthusiast Car Driving and Autocross