

# Matthew Wilkins

Objective	Obtain a co-op position that will utilize Mechanical or Manufacturing Engineering skills available from late January to August 2026.
Education	<b>Rochester Institute of Technology</b> , Rochester, New York Mechatronics Engineering Technology Bachelor of Science (Expected May 2028) GPA: 3.27
Skills	<b>Computer:</b> Autodesk Fusion 360, SolidWorks, Multisim, MATLAB, Microsoft Word/Excel/PowerPoint, Optical Comparator Measurement <b>Machine Fabrication:</b> Tormach CNC Mill, Bridgeport Vertical Mill, Lathe, and 3D Printing
Courses	<b>Current:</b> Mechanics for Mechatronics, Foundations of Metals/Characterizations Lab <b>Completed:</b> Machine Tools Lab, Manufacturing Processes, Circuits 1, Engineering Communication and Tolerancing, Introduction to Digital and Micro Systems, Electronic Devices
Projects	<b>Hatteras 85 Yacht Engine Maintenance and Bridge Electronics Restoration</b> (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.  <b>Bits 'n Bytes</b> (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.  <b>Air Engine</b> (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.  <b>Aerial Search and Rescue Modular Thermal Payload</b> (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.  <b>Porsche 986 Boxster S 550 Spyder Restoration</b> (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	<b>Split Second Shutter</b> , MD (2017 – Present) Photographer/Videographer Photographs and edits sports, weddings, graduations, and other events. Produces and edits sports, weddings, graduations, and other event films.  <b>Wilkins Automotive</b> , Glen Burnie, MD (Summers 2018 – 2023) Express Service Mechanic, Sales, Marketing Serviced GMC, Buick, and Subaru Vehicles. Produced media for point of view driving/reviews and photography for social media and sales homepage.
Activities	<b>Computer Science House</b> , RIT (Fall 2025 - Present) Financial Treasurer on Executive Board 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.  <b>First Tech Challenge: First Robotics</b> (Fall 2019 - Spring 2023) Co-lead Robot Designer/Engineer 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