Ethan Rowe

Middleboro, MA -- 860-970-7024 – rowees@protonmail.com
https://ethansrowe.github.io/

Education & Certifications

Master of Engineering in Additive Manufacturing and Design Expected December 2025
Pennsylvania State University
Masters Project: Used additive manufacturing techniques to produce depth-triggered fuse.

Bachelor of Science in Interdisciplinary Engineering Graduated August 2022
Concentration in Mechanical Engineering
Minor in Manufacturing Engineering, Minor in Physics.
Relevant Coursework: Additive Manufacturing, Computer Aided Design/Computer Aided Manufacturing, Thermal Physics, Calculus 3, Differential Equations, Linear Algebra

Certifications
Six Sigma Green Belt Obtained February 2025
- Project: Improving first pass yield of precision lab equipment.

Certified Manufacturing Technologist Obtained July 2022

Employment History

AMETEK Brookfield, Middleboro, Massachusetts
Manufacturing Engineer August 2022- Present
- Responsible for long-term improvement projects troubleshooting immediate hurdles to production
- Generated est. $2 million USD savings through additive manufacturing expertise
- Supported production of lab devices using lean principles to identify production improvements
- Working with a team of assembly operators and machinists
- Coordinated vertical integration of manufacturing and supply for critical components
- Consulted on Design for Manufacturing and Assembly tasks to support new product lines
- Refactored designs for optimal assembly and manufacturing alongside design engineers

Woods Hole Oceanographic Institute, Woods Hole, Massachusetts
Applied Ocean Physics and Engineering COOP (ACOMMS) September 2021 – January 2022
- Designed an experiment to test the corrosion factors of different fastening solutions.
- Prototyped a docking concept for the REMUS vehicle. A working prototype was constructed.
- Facilitated the manufacturing process of new components by creating process drawings.

Fusion Optix, Woburn, Massachusetts
Product Engineering Intern January 2021 – May 2021
- Utilized 3D printers/CO2 lasers to rapidly prototype LED packages and innovate on customer requests. Rapidly iterated to quickly meet specifications using a design for manufacturing mindset.

Mitsubishi Power Aero, (*Formerly PW Power Systems*) Glastonbury, Connecticut
Procurement and Parts Analysis Engineering Intern May 2020 – August 2020
- Identified long-lead-time parts in terms of manufacturability, tooling, and material cost to prioritize part procurement.

Manufacturing/Industrial Engineering Intern May 2019 – August 2019
- Facilitated industrialization by analyzing quality requirements from drawings/documents

Skills

- Advanced: Engineering Design Process, MS PowerPoint, MS Excel, SolidWorks/Autodesk, various 3D printer preparation tools/slicers, Design for Additive Manufacturing
- Above Average: Blueprint Reading, 3-Axis Milling Machines, Casting, Material Testing (Instron), , Laser cutting machines, 3D printer troubleshooting, nTopology
- Intermediate: G Code, Java Programming, MATLAB, Python, Lean Manufacturing

Projects

- Masters project: Developed a framework for a passively activated depth fuse. *This work has been accepted for publication into IEEE/MTS Oceans Great Lakes 2025* (2025)
- Senior Capstone project: incorporated Ping360 sonar to implement obstacle avoidance in a ROV.
- Modeled and fabricated an electric go kart. Raced for the first time in the electrathon race at Limerock park. (2018)
- Participated in First Robotics on team 3464, first year helped construct robot that made it to the world championships. Second year lead the team as one of the captains, helped fundraise $7,000 during the season. (2018)