Thomas Anderson

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Engineering student with experience in mechanical design, mechatronics, and data-driven problem-solving.

Focused on controls, GNC, and automation with a strong interest in defense applications.

Eager to contribute to mission-critical technologies and learn from industry professionals.

EDUCATION

B.S. Mechanical Engineering, Utah Tech University (Expected May 2026)

- INSPIRE Scholar: Funded by the National Science Foundation
- Relevant Coursework: Autonomous Vehicles, Controls, Fluid Mechanics, Machinery, Thermodynamics, Prototyping

EXPERIENCE

Mechanical Engineering Intern, Wilson Connectivity (May 2023 - Jan 2025)

- Used SolidWorks to implement design concepts improving antenna mount durability in consumer electronics.
- Designed test fixtures for PCB boards and signal boosters, boosting efficiency and accuracy.
- Utilized prototyping tools including 3D printing, CNC machining, drill press, and band saw.

Materials Intern, RAM Aviation Space & Defense (May 2022 - Aug 2022)

- Collaborated with engineers on cost analysis and reduction initiatives.
- Optimized pneumatics assembly area, improving efficiency.
- Assembled an average of 10 complex kits daily, demonstrating adaptability in production processes.

UAV Technician Intern, Vector (Jul 2025 - Aug 2025)

- Assisted with assembly and integration of UAV systems, streamlining manufacturing processes.
- Executed ground and flight tests for UAV components, validating system readiness.
- Diagnosed and resolved electro-mechanical issues, enhancing reliability.

PROJECTS

Autonomous UAV Control and Path Planning

- Implemented and optimized RRT* algorithms for autonomous navigation.
- Built full autopilot stack in MATLAB, validated in simulation and live flight tests.

Turbo Regatta (Engineering Design Day)

- Designed electric propulsion system for pedal boats in cross-disciplinary team.
- Led waterproof mechanical UI/UX design and integration of ergonomic controls with digital systems.

Carnival Game (STEM Outreach)

- Developed Arduino + IoT scoring system using Hall effect sensors.
- Engaged 400+ participants with real-time interactive scoreboard.

Mechatronic Miniature Golf Green

- Built laser-controlled gate using Arduino, SolidWorks, and laser cutting.
- STEM outreach project played by 300+ attendees.

VOLUNTEER

Eagle Scout, Boy Scouts of America

- Achieved Eagle Scout rank with two palms.
- Led community workshops to raise awareness of organ donation.

SKILLS

Design: SolidWorks, OnShape, Fusion 360, ANSYS

Fabrication: 3D Printing, CNC Machining, Laser Cutting, Welding, Soldering

Programming: MATLAB, Arduino

Other: Control Systems, Sensor Fusion, Lean Manufacturing, Six Sigma