Matt Lasselle

612-248-0687 | linkedin.com/in/matthewlasselle | mlasselle22@icloud.com

Summary:

Passionate about advancing aerospace technologies through innovative mechanical design and analysis. Mechanical engineer seeking full-time opportunities, with strong skills in design, data analysis, and manufacturing. Experienced in the design, testing, and validation of mechanical systems and assemblies.

Education:

Iowa State University, College of Engineering Expected Graduation: May 2026
Bachelor of Science, Mechanical Engineering GPA: 3.44

Professional Experience:

Stratasys – Test Engineer Intern May 2025 – August 2025

- Developed and programmed a compression test method on a MTS Criterion Model 43 using TestSuite TW Elite, enabling improved data logging and more accurate measurement of a wide range of material properties.
- Assessed material data to establish new metrics for defining compressive yielding to improve data provided to customers.
- Reduced required compression testing specimens by analyzing the effect of slenderness ratio on compressive yield strength, while maintaining ASTM D695-10 compliance.
- Automated data formatting to increase post-test analysis efficiency and implemented safety measures in test methods to improve lab safety and protect equipment and operators.

Club Experience:

Cyclone Rocketry Club

Vice President of Engineering June 2025 – Present

- Guided team leads in defining technical objectives and project scope for the club's competition rocket, resulting in a successfully planned budget, action plan, vehicle size, and onboard technologies.

Mechanical Co-Team Lead June 2024 – June 2025

- Led a multidisciplinary student engineering team through the design, fabrication, and integration of a high-altitude pressure vessel using CAD, FEA, and traditional manufacturing techniques.

Honeywell FM&T Rocketry Student Launch Contract Team Member August 2024 – Present

- Designed and fabricated avionics fixturing, incorporating FEA and ANSI tolerancing standards; presented finalized solutions to external sponsors for review and approval.

Projects:

- Designed and manufactured a 3D printer, validated platen heating via thermocouple readings, confirmed part mechanical strength through tensile and compression testing, and established reliable extrusion consistency and dimensional accuracy through measurement analysis.
- Fabricated a load frame to test 3D-printed components and assemblies, incorporating data logging, writing, and visualization within an embedded system.
- Modeled and simulated an active roll control rocket using CAD and CFD, integrating sensors and actuators through embedded systems programmed in C++ with onboard data collection.

Technical Skills:

- Mechanical Design
- SOLIDWORKS CAD, FEA, and CFD
- Data Collection and Analysis
- Additive Manufacturing
- Test Method Development
- MTS TestSuite TW Elite