

LAKE LARSON

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Education

The University of Alabama

B.S. Aerospace Engineering, GPA 3.57/4.00, Eagle Scout, Sigma Gamma Tau Honor Society, Dean's List

May 2027
Tuscaloosa, AL

Relevant Experience

Kratos Defense & Security Solutions

Thermo Structural Systems CO-OP

August 2025 – Present

Birmingham, AL

Lockheed Martin RMS (Sikorsky)

May 2025 - August 2025

Flight Test Structures and Dynamics Intern

Jupiter, FL

- Created data displays in Curtiss-Wright IADS to support quick, informed decision-making
- Conducted rap tests on aircraft components to ensure resonant frequencies were isolated from airframe natural frequencies
- Designed and kinematically modeled a test stand in CATIA V5
- Processed and analyzed flight test data using batch scripts to filter results and generated visual graphs and charts to support design decisions

Kratos Defense & Security Solutions

May 2024 – May 2025

Thermo Structural Systems CO-OP

Birmingham, AL

- Designed, conducted, monitored, and troubleshoot hundreds of material property tests to meet customers' data requirements, ensuring precise results that meet high industry standards and align with client expectations
- Collaborated on pioneering crack propagation studies at Kratos by designing specialized test fixtures and developing a data interpreter, providing engineers with accurate results and tools to improve future tests
- Communicated with representatives from industry leaders to ensure accurate, on-time delivery of high-quality test results
- Drafted technical drawings that accommodated the customer's desired test samples within the provided materials, enabling efficient fabrication by the internal machine shop, ensuring on-time and project completion
- Supported the standardization and organization of test samples and their associated hardware, by surveying shop technicians and engineers, ensuring the most optimal test samples were selected
- Communicated with technicians, designed, drafted drawings, contracted machining and final assembly in the process of developing an internal IRAD product that reduced test setup time by 50%

Formula SAE – Crimson Racing

August 2022 – Present

Aerodynamics Assistant Lead and Rear Wing senior engineer

Tuscaloosa, AL

- Designed rear wing utilizing CFD and SolidWorks to do iterative design to reduce pressure gradients and decrease vortex magnitude, resulting in an 11% increase in efficiency and a 1.5 lbs reduction in weight
- Communicated with lead engineers to ensure seamless integration of the rear wing with other vehicle components while meeting set performance goals
- Mentor a team of two junior engineers, delegating tasks while promoting skill development, preparing them to design next year's car

Additional Experience

University of Alabama Housing and Residential Communities

August 2023 – December 2024

Residential Advisor

Tuscaloosa, AL

- Served as a residential advisor to 80 freshmen over two years, providing leadership and support to foster an environment for academic success and personal growth
- Planned and ran nine community-building events to promote student engagement and a sense of community

Skills

Engineering and Design: SolidWorks, CATIA, Creo, OnShape, Fusion 360, Rhino3D, AutoCAD, computational fluid dynamics (Ansys Fluent), FEA (SolidWorks & Abaqus), technical drawing, rapid prototyping, iterative design, test & evaluation, Paraview

Manufacturing: 3D printing, composites manufacturing, aluminum fabrication, additive manufacturing

Programming: Python, MATLAB, LaTeX, HTML, Microsoft Office Suite

Other: project leadership, continuous improvement, troubleshooting, detail oriented, effective communicator