LAKE LARSON

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Education

The University of Alabama May 2027

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

Tuscaloosa, AL

Relevant Experience

Lockheed Martin RMS (Sikorsky)

Flight Test Structures and Dynamics Intern

May 2025 -Present

Jupiter, FL

• Assist in processing and analyzing flight test data to extract key performance metrics

Kratos Defense & Security Solutions

Thermo Structural Systems CO-OP

May 2024 - May 2025

Birmingham, AL

- Designed, conducted, monitored, and troubleshot 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

Residential Advisor

August 2023 - December 2024

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

Boy Scouts of America - Troop 81

March 2016 - May 2022

Eagle Scout, Project lead, Senior Patrol Leader, Treasurer

Maryville, TN

• Planned, got materials donated, and led the troop through an Eagle Scout project, a flag deposit box that has over 30 flags a month deposited by the community; additionally got food and drinks donated to feed volunteers

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