

# LAKE LARSON

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## Education

### The University of Alabama

*B.S. Aerospace Engineering, GPA 3.63/4.00, Sigma Gamma Tau Honor Society, Honors College*

**Expected May 2027**

*Tuscaloosa, AL*

## Relevant Experience

### Kratos Defense & Security Solutions

*Thermo Structural Systems CO-OP*

**May 2024 – Present**

*Birmingham, AL*

- Design, conduct, monitor, 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
- Communicate with representatives from top defense industry companies to ensure accurate on-time delivery of high-quality test results
- Draft 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

### Formula SAE – Crimson Racing

*Aerodynamics Assistant Lead and Rear Wing senior engineer*

**August 2022 – Present**

*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 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 – Present**

*Tuscaloosa, AL*

- Serve as a residential advisor to 40 freshmen each year, providing leadership and support to foster an environment for academic success and personal growth
- Plan and ran six community-building events to promote student engagement and a sense of community

### Boy Scouts of America – Troop 81

*Project lead, Senior Patrol Leader, Treasurer*

**June 2020 – May 2022**

*Maryville, TN*

- Led the Troop through over 20 campouts and over a hundred meetings
- 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

## Skills

**Engineering and Design:** SolidWorks, CFD (Ansys Fluent), FEA (SolidWorks and Abaqus), technical drawing, rapid prototyping, iterative design, test & evaluation, troubleshooting

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

**Programming:** Python, MATLAB, LaTeX, HTML

**Other:** Microsoft Office Suite, Paraview, project leadership, continuous improvement