

Emma Strong

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Education

The University of Alabama, Tuscaloosa, Alabama

B.S. Aerospace Engineering	May 2020	3.48 GPA
M.S. Aerospace Engineering and Mechanics	July 2021	3.44 GPA

Dean's List – Spring 2019, Fall 2019 | President's List – Spring 2020

Relevant courses: Aerodynamics, Aerospace Structures, Finite Element Analysis, Engineering Modeling, Orbital Mechanics, Space Environment, Space Propulsion, Space Systems, Spacecraft Dynamics & Control

Senior Design Project: Designed and built a stereoscopic camera package with robotic extension to take measurements of the previously unexplored Marius Hills Skylight on the Moon

Skills

- Proficiency: SolidWorks CAD, MATLAB, Excel, Microsoft Office Specialist
- Basic proficiency: C++, Python, Systems Tool Kit, Abaqus FEA, Hypermesh, SimScale CFD, Machining

Extracurricular Activities

- **UA Space – Design Team** **February 2019 – August 2019**
 - Planned and gathered resources to design, build, and launch a CubeSat through NASA's ELaNa Program
 - Led the logistics operation allowing processes to run smoothly
 - Performed preliminary research into CubeSat systems and thermosphere environment
 - Developed teamwork, communication, and problem-solving skills
- **Theta Tau – Professional Engineering Fraternity** **August 2018 – December 2020**
 - Member of the Mu chapter of Theta Tau, a professional engineering fraternity
 - Reconstructed and reimplemented database of member information into our new website
 - Fostering and developing service, interpersonal, and professional skills
- **Crimson Racing – Formula SAE Design Team** **January 2017 – December 2017**
 - Assisted in the design of the body, aero systems, and cooling shroud for the CR18 race car
 - Iteratively designed components using CAD software and basic aerodynamic principles to achieve design goals
 - Led the design of the electrical instrumentation systems of the go-kart project
 - Explored the functionality and design of automotive data acquisition systems
- **AIAA – Professional Engineering Society** **August 2016 – Present**
 - Member of the American Institute of Aeronautics and Astronautics
 - Networking with industry professionals and gaining insight into the aerospace industry as a whole

Work Experience

- **Online Course Technical Support** **May 2019 – August 2019**
 - College of Continuing Studies – University of Alabama
 - Provided friendly and personable technical support for students and professors
 - Investigated and provided solutions to complex technical issues
- **Fireworks Salesperson** **Dec. 2017 – Dec. 2020 (seasonal)**
 - Uncle Sam's Fireworks – Shreveport, LA
 - Demonstrated ability to be flexible and compromising in customer-facing operations
 - Sorted, organized, and packed explosives for transport