

Sam M

Motivated Mechanical Engineering student, Undergraduate Researcher, Firefighter, and Pilot.

Education

University of Tennessee at Chattanooga

B.S. Mechanical Engineering
GPA: 3.5 as of Spring 2024

Chattanooga, TN
Expected. Dec. 2024

Experience

University of Tennessee Chattanooga

Undergraduate Research Assistant

Chattanooga, TN
April 2023 - Present

- Developed an air-to-fuel ratio measuring system for the senior Mechanical Engineering lab.
- Published a research paper to the American Society for Engineering Education as the first author.
- Have become proficient in 3D modeling for Computational Fluid Dynamics software such as NASA's FUN3D and meshing software such as Fidelity Pointwise.

Volkswagen Chattanooga

Quality Assurance Planning and Projects Intern

Chattanooga, TN
May 2022 - Aug 2022

- Coordinated the launch of Volkswagen's first electric vehicle in America and model year change for the Atlas Cross Sport by overseeing the manufacturing process for special vehicles driven and reviewed by top management
- Led international and inter-departmental meetings in English and German to discuss production progress and quality issues, ensuring effective communication across teams.
- Signed off on each special vehicle at every step of the manufacturing process, ensuring compliance with quality standards and timely delivery to management for review.

TriCommunity Volunteer Fire Department

Fire Fighter/Driver

Collegedale, TN
June 2021 - Present

- Entrusted with the lives of patients and colleagues in high-stress environments when responding to various emergency incidents such as car wrecks, heart attacks, or burning buildings.
- Responsible for safely driving emergency vehicles in all traffic and weather conditions to get crews to the emergency scene.

Skills/Hobbies/Certifications

- 3D Modelling and 3D Printing in Solidworks, Fusion 360, and Blender, Fidelity Pointwise, Cadence CFD, Ansys Fluent.
- Coding Experience in Python
- NAR High Powered Rocketry Level 1
- FAA Private Pilot License: Single Engine, Land
- FAA Part 107 Commercial Drone License
- NREMT-R Emergency Medical Responder