Miles Perry

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Summary

Aerospace Engineering graduate with hands-on experience and seeking roles in CFD, FEA, aerodynamics, thermodynamics, propulsion, structural, and mechanical design. Strong foundation in fluid and thermal systems, structural analysis, and manufacturable hardware design. Concluding with experience in support analysis, fabrication, and testing in fast-paced engineering environments.

Education

Syracuse University   **January 2021 - May 2025**
Degree: *B.S. in Aerospace Engineering*

Programming, Skills, and Certifications:

• **Skills:** *-Computational Fluid Dynamics - Finite Element Analysis -Ansys   -Leadership Training -Microsoft word, excel, powerpoint -Solidworks -Creo   -Adobe Photoshop   - Aerospace Structures -Xlr5*
• **Programming Languages:** *-Matlab   -Javascript   -C   -C++   -R   -Python -AVL*

Work Experience:

Research Assistant   **Jan 2022 - December 2023**
Syracuse University Thermodynamic and Combustion Lab
- Collaborated with a professor and other researchers on different topics in thermodynamics and internal combustion. Designed and evaluated thrust on a mini turbojet engine. Discussed Diesel exhaust after treatment – Selective Catalytic Reduction and Diesel Exhaust Fuel for NOx emission control.
- Drafted a thesis outline evaluating aircraft contrail microphysics, environmental impact, and mitigation strategies.
- Computational Fluid Dynamics (CFD) of engine knock (conference presentation).
- Outline of thesis on aircraft thermodynamics and propulsion, and how they affect aircraft contrails and their effect on the environment.

Engineering Applications and Projects

Computer-Aided Design (Solidworks)
- Used SolidWorks to help create a 6-part Combustion Engine as part of a group project. The engine was created using SolidWorks, applying tolerances, constraints, and functional motion.

Computer-Aided Design and Computational Fluid Dynamics (CFD)
- Used Computational Fluid Dynamics to do velocity and pressure field analysis of an airfoil at different angles of attack. Conducted simulations of a 2D airfoil at multiple angles of attack using ANSYS Fluent; evaluated velocity fields, pressure distributions, and lift characteristics.

Design and Manufacturing of a Small Aircraft
- Used my expertise in Finite Element Analysis, Computational Fluid Dynamics, and aircraft performance to help design an aircraft to carry a payload for over 4.3 seconds of flight time without electricity and other constraints. I manufactured the fuselage and was responsible for the structural integrity of the aircraft.

Organizations and Leadership:

Boy Scouts of America   **September 2013- March 2020**
Troop 1657
- Rank: **EAGLE SCOUT** and **SENIOR PATROL LEADER**

N.S.B.E.   **September 2021- (present)**
- Senior Member

The American Institute of Aeronautics and Astronautics (AIAA)   **September 2021- (present)**
- Member