Morgan A. Delgado

NC State University | Raleigh, NC | (919) 000-0000 | email@ncsu.edu

Education

North Carolina State University – Master of Science in Aerospace Engineering, Expected May 2025
Thesis Advisor: Dr. Benjamin T. Cross
Thesis: *'Aerodynamic Performance Optimization of Hypersonic Inlets Using CFD and Surrogate Modeling'*

Texas A&M University – Bachelor of Science in Aerospace Engineering, May 2023
Minor: Applied Mathematics
Magna Cum Laude, Sigma Gamma Tau Honor Society

Research Experience

Graduate Research Assistant, High-Speed Aerodynamics Lab, NCSU, 2023–*Present*

Undergraduate Researcher, Aerospace Computational Methods Group, Texas A&M, 2021–2023

Publications

Cross, B.T., **Delgado, M.A.**, & Li, X. (2024). CFD-Driven Design Optimization for Hypersonic Inlet Geometries. *AIAA Journal of Propulsion and Power*.

Delgado, M.A., & Reynolds, P. (2023). Multi-Disciplinary Design Optimization in Aerospace Structures. *Computational Mechanics in Aerospace Engineering*.

Selected Presentations

"CFD Optimization of Hypersonic Inlets," AIAA SciTech Forum, Orlando, FL, January 2024.

"Structural Dynamics Modeling for Space Applications," AIAA Region IV Conference, Houston, TX, April 2023.

Technical Skills

ANSYS Fluent, MATLAB, Python, SolidWorks, Siemens NX, OpenFOAM, LaTeX, Git

Fellowships and Awards

- NCSU MAE Graduate Fellowship, 2023–2024
- Best Undergraduate Poster Award – Texas A&M Research Week, 2022

Professional Memberships

- American Institute of Aeronautics and Astronautics (AIAA)
- National Society of Professional Engineers (NSPE)