Kevin N. Maranto

Phone: (404) 313-3064 | Email: kmaranto3@gatech.edu | US Citizen
https://meritpages.com/kevinmaranto | www.linkedin.com/in/kmaranto

Education

Georgia Institute of Technology — **Atlanta, GA**
Master of Science | Aerospace Engineering | Est. Graduation Dec. 2026 | GPA 4.0 — *Fall 2025 - Present*
- Student of Aerospace Systems Design Laboratory (**ASDL**)
- **Relevant Coursework:** Advanced Design Methods, Orbital Mechanics, Optimization for the Design of Engineered Systems, **Systems of Systems**, Aircraft Design

Bachelor of Science | Aerospace Engineering | May 2, 2025 | GPA 3.85 — *2021 - 2025*
- **Relevant Coursework:** Jet and Rocket Propulsion, Vehicle Performance, System Dynamics, Controls, **Robotic Systems and Autonomy**, Space Flight Operations, Spacecraft Flight Dynamics, Structures, and Intro to Safety by Design

Extracurriculars: Yellow Jacket Flying Club, Musician's Network, GT Club Baseball, **AIAA**

Technical Skills

Intermediate: CFD (StarCCM+), Solid Modeling/**CAD**, **Python**, OpenMDAO, MATLAB, C++, Machining and Manufacturing, Unity Game Engine, Microsoft Suite, Technical Report Writing
Beginner: SysML (MagicDraw), GTAW Welding, Academic Software: FUN3D, POST2, FLOPS, ALCCA

Relevant Experience

Graduate Research Assistant — **Atlanta, GA**
- Aerospace Systems Design Laboratory — *August 2025 - Present*
  - *Utilized sophisticated CFD/ROM-in-the-loop software for novel aerodynamic simulations.*

NASA OSTEM Intern — **Huntsville, AL**
- Marshall Space Flight Center, Metal Processes and Manufacturing — *June 2025 - August 2025*
  - *Shadowed the welding and manufacturing operations for NASA's Space Launch System (SLS).*
  - *Learned about friction stir welding and hands-on GTAW welding techniques.*

Undergraduate Student Researcher — **Atlanta, GA**
- Aerospace Systems Design Laboratory — *January 2025 - May 2025*
  - *Explored a design space for a small scale lunar sample return mission with a team.*
  - *Developed a python script to size thermal protective layers using phase change materials.*
- Carbon Neutral Energy Solutions Laboratory — *May 2024 - December 2024*
  - *Researched magnetoplasmadynamic thrusters with advanced hardware, software, and optics.*
  - *Set up and calibrated laboratory equipment, such as lasers and vacuum chambers.*

Undergraduate Research Assistant (Laser Optics) — **Atlanta, GA**
- Sensing Technologies Research Laboratory — *January 2023 - May 2024*
  - *Developed laser diagnostic tools for high-speed flows and contributed to research papers on FLDI, schlieren, and digital holography imaging techniques.*
  - *Helped write and publish paper (https://doi.org/10.1364/OL.520660).*

Associate Engineering Technician — **Marietta, GA**
- Stanley Black and Decker, Cribmaster — *June 2023 - August 2023*
  - *Built and tested prototypes for smart (RFID) tool storage solutions.*
  - *Utilized CREO CAD extensively for 3D modeling.*
  - *Documented technical progress and contributed to product development reports.*

Projects

Academic Coursework — *2025-2026*
- Developed excel tool for conceptual design of aircraft using **sizing and synthesis** methodology.
- **Designed conceptual aircraft** from Embraer 190 baseline to meet stakeholder and derived system requirements through iteration in semester-long group project using advanced design principles.

Grand Challenges — *2025-2026*
- MDAO for Collaborative Mobility Aircraft Design. (Sponsor: Air Force Research Lab (AFRL)
- System of Systems Architectures for Fighting Wildfires. (Sponsor: SAAB)

Georgia Institute of Technology (GT) Carbon Reduction Challenge — *2024*
- Researched the impact of motion sensors in campus dorms to reduce carbon emissions.
- Presented findings to expert staff at the GT Office of Sustainability.

Achievements

8th Annual GA Tech Carbon Reduction Challenge 1st Place Winner — *2024*
Eagle Scout of Boy Scouts of America — *2020*