Nicholas Lazo

Miami, Florida | 786-375-0920 | nicklazo2005@gmail.com | linkedin.com/in/nicholaslazo2005

OBJECTIVE

Mechanical Engineering student (B.S. expected 2027) focusing on aerospace design, seeking internships to apply design, analysis, leadership and manufacturing skills. Experienced in RC aircraft design, OSHA-compliant maintenance platforms, and operation of knee mills, lathes and CNC tools. Proficient in SolidWorks, Siemens NX, XFLR5, Python, Excel and composites/wet layups.

EDUCATION

B.S. Mechanical Engineering — Expected Fall 2027

Florida International University — Miami, Florida

- GPA 3.92 / 4.0
- Relevant coursework: Dynamics, Mechanical Design, Mechanics of Materials, Statics, Fluid Mechanics, Thermodynamics

EXPERIENCE

Chief Engineer — March 2026 – Present

Panther Aero (AIAA) — Miami, Florida

- Lead cross-functional engineering teams across aerodynamics, structures, propulsion, avionics and manufacturing in the development of aircraft for the AIAA Design/Build/Fly competition.
- Oversee project schedules and technical decisions from concept through fabrication, ensuring on-time delivery and adherence to performance and safety criteria.
- Coordinate subsystem integration and engineering trade studies to balance aircraft weight, aerodynamic performance, manufacturability and mission scoring requirements.

Manufacturing Lead — January 2026 – March 2026

Panther Aero — Miami, Florida

- Machined and fabricated precision parts using knee mill, lathe and CNC equipment; interpreted engineering drawings and collaborated on design-for-manufacturing initiatives.
- Applied composite manufacturing and carbon fiber wet layup techniques to aircraft components.
- Used Siemens NX and SolidWorks to design and refine components for production.

Math SAT Tutor & Team Lead — April 2025 – Present

Peace of Pi — Miami, Florida

- Tutor high school students in advanced SAT Math, achieving an average score improvement of 120+ points and an average Math score of 760; develop rigorous practice materials emphasizing quantitative reasoning.
- Lead a team of content developers by establishing SOPs, defining performance goals, reviewing deliverables and providing structured feedback to improve content quality and workflow efficiency.
- Develop educational content that has generated tens of thousands of views, translating complex mathematical concepts into clear, technically accurate material for a broad audience.

PROJECTS

Boeing 787 Aircraft Maintenance Platform — SolidWorks

Team lead, sole designer and primary presenter — 2nd place

- Designed an OSHA-compliant two-level rolling platform giving technicians safe working access to both the nose and the sides of a Boeing 787, with a deck profile cut to the fuselage contour to prevent tool-to-aircraft contact.
- Traded structural mass against mobility using a heavy-duty locking caster configuration, and routed pneumatic and electrical lines inside the deck to keep the walking surface clear of trip hazards.
- Led a team of four and presented the design to a panel of Boeing engineers; placed 2nd.

SKILLS

CAD & Simulation: SolidWorks, Siemens NX, XFLR5, Fusion 360, Mastercam

Manufacturing: Manual and CNC machining, knee mill, lathe, composites and carbon fiber wet layup, 3D printing

Programming & Analysis: Python (introductory), MATLAB (introductory)

Data Tools: Excel and Google Sheets (proficient)

Languages: English (native), Spanish (conversational)