

## Research Statement

BS honors student in Aerospace Engineering and Engineering Physics at Embry-Riddle Aeronautical University, consistently honored on the Dean's List, and a dedicated tutor and research assistant. With research experience in academia and industry, and prior internship experience at Honeywell and NASA, I am eager to pursue a graduate degree with a research focus in biologically inspired robotics, particularly in novel modes of robot locomotion and manipulation.

## Education

**Embry-Riddle Aeronautical University (ERAU), Daytona Beach, FL** Expected May 2025  
Bachelor of Science in Aerospace Engineering | Concentration: Astronautics GPA: 3.75/4.00  
Bachelor of Science in Engineering Physics | Concentration: Spacecraft Systems Honors Program  
• Minors: Applied Mathematics & Computer Aided Design/Manufacturing  
• Academic Honors: Dean's List (All terms)

**Broward College, Davie, FL** Aug. 2018 – June 2020  
Associate of Arts with Highest Honors in Engineering GPA: 3.94/4.00  
• Academic Honors: President's List (3 terms), Dean's List (1 term) Honors College

## Relevant Skills

**Design:** CATIA V5, Autodesk Inventor, Fusion 360, Femap/Nastran, Blender  
**Programming:** MATLAB, Python, C/C++, Arduino, Microsoft Excel  
**Technical:** 3D Printing, Soldering, Circuit Design, Rapid Prototyping, GD&T  
**Languages:** English (Native), Spanish (Conversational), French (Basic Proficiency)

## Professional Experience

**ERAU Space and Atmospheric Instrumentation Lab, Daytona Beach, FL** Feb. 2023 – Present  
Undergraduate Research Assistant to Dr. Aroh Barjatya  
• Enhanced the control and monitoring system of a spin table used in rocket boom deployment testing.  
• Soldered and constructed multiple payloads for GPS radiosonde balloon satellite launches.  
• Tested thermistor configurations for improved data accuracy in high-altitude experiments.  
• Assisted with the deployment and monitoring of GPS receivers used to assess the launch impact SpaceX's Falcon Heavy had on ionospheric electromagnetic wave propagation.

**NASA John H. Glenn Research Center, Cleveland, OH** Aug. 2023 – Dec. 2023  
Graphics and Visualization Lab Intern  
• Designed detailed models of the X-66A, a Transonic Truss-Based Wing concept vehicle developed between Boeing and NASA under the Advanced Air Transport Technology initiative.  
• Developed models and assemblies for ongoing construction efforts to facilitate the replacement of NASA's Electric Aircraft Testbed with an improved test facility.  
• Served as the primary liaison for the Glenn Research Center within PAXC, an intern-led organization aimed at fostering communication and collaboration between NASA centers.  
• Volunteered at numerous NASA outreach events, where I played a key role in both informing and inspiring the public about cutting-edge research and technology.

**Honeywell Aerospace, Clearwater, FL** Nov. 2022 – Aug. 2023  
Electrical & Systems Engineering Research Assistant & Intern  
• Volunteered for a collaborative research program aimed at optimizing the diagnosis and repair processes of malfunctioning inertial navigation systems, addressing a persistent issue at Honeywell's Clearwater facility.  
• Proactively scheduled and conducted frequent meetings with site engineers and technicians, providing valuable insights into the intricacies of the manufacturing process and ensuring a seamless alignment between the system's functionality and the manufacturing requirements.  
• Presented the model to facility leaders, highlighting a projected annual labor cost reduction of \$250,000 for the eTALIN product line and establishing a framework for extending these savings to other product lines.

**ERAU Academic Advancement Center, Daytona Beach, FL** Aug. 2022 – Present  
Engineering & Engineering Sciences Tutor  
• Provide mentorship and guidance to fellow students, actively assisting them in improving their understanding of fundamental engineering disciplines such as Statics, Dynamics, Solid Mechanics, MATLAB, and Aerospace Vehicles.