

EDUCATION

Embry-Riddle Aeronautical University (ERAU), Daytona Beach, Florida 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, Florida 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, Blender, Femap
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

NASA John H. Glenn Research Center, Cleveland, Ohio Aug. 2023 - Present
Graphics and Visualization Lab Intern

- Support the development of concept vehicles in a state-of-the-art flight simulator by utilizing virtual and augmented reality technologies and modeling both conceptual electric aircraft designs and hardware prototypes.

ERAU Space and Atmospheric Instrumentation Lab, Daytona Beach, Florida Feb. 2023 - Present
Undergraduate Research Assistant

- Actively contribute to multiple research endeavors alongside master's and Ph.D. candidates, drawing upon their knowledge and expertise to enhance my own understanding of microcomputers and electronic instrumentation.

Honeywell Aerospace, Clearwater, Florida Nov. 2022 - Aug. 2023
Electrical & Systems Engineering Intern/Research Assistant

- Volunteered to join a collaborative research initiative, leveraging a diverse and robust engineering background to address real-world industry challenges while providing a fresh and innovative perspective.
- Scheduled weekly meetings with site engineers and technicians to collaboratively design and implement a knowledge-based system, streamlining and eliminating bottlenecks in the diagnosis and repair of faulty inertial navigation systems.
- 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, Florida 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.

PROJECT EXPERIENCE

Sumo Robot Competition – Design and Algorithm

- Spearheaded the design and development of an autonomous sumo bot, resulting in a highly competitive robot that consistently performed well in both defensive and offensive scenarios.
- Conducted extensive research on optimal designs testing and refining multiple prototypes.
- Developed custom Python scripts enabling autonomous movement and defensive behaviors in a dynamic environment.
- Demonstrated strong leadership and project management skills, where through effective collaboration and communication, our design emerged victorious.

Remote Control Tumbler Car – Design Replication and Assembly

- Designed and fabricated a 1:1 scale remote control tumbler car using CATIA V5, resulting in a fully assembled and functional model devoid of collision issues.
- Utilized dimensioning and modeling principles to create over 20 individual parts with their respective subassemblies and developed a comprehensive drawing package detailing the design, assembly, and functional details of the model.
- Demonstrated proficiency in CAD software and attention to detail in the design process.