Kilian O. Olen

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EDUCATION

Embry-Riddle Aeronautical University (ERAU)

Daytona Beach, Florida Expected May 2025

Bachelor of Science in Aerospace Engineering

• Concentration: Astronautics

• Minor: Computer Aided Design / Computer Aided Manufacturing

Bachelor of Science in Engineering Physics

• Concentration: Spacecraft Systems

• Minor: Applied Mathematics

Broward College Davie, Florida

Associate of Arts with Highest Honors in Engineering

June 2020

Expected May 2025

RESEARCH INTERESTS

Legged Robots Biologically Inspired Robotics Search and Rescue Robotics

Field Robotics Space Robots and Systems Manipulation

RESEARCH EXPERIENCE

ERAU Space and Atmospheric Instrumentation Laboratory

Daytona Beach, Florida Feb. 2023 – Present

Undergraduate Research Assistant to Dr. Aroh Barjatya

- Assisted in the assembly of electronic boards and the construction of payloads for upcoming balloon satellite launches, demonstrating skills in soldering and electronic component integration.
- Conducted extensive testing on various thermistors intended for balloon satellite payloads, optimizing their performance to achieve precise altitude-dependent readings, contributing to data accuracy in high-altitude experiments.
- Enhanced the control and monitoring system of a spin table used in testing boom deployment on sounding rockets, introducing improvements that significantly increased system efficiency and data accuracy for critical rocket deployment experiments.

Honeywell Aerospace

Clearwater, Florida

Electrical & Systems Engineering Research Assistant

Nov. 2022 – May 2023

- Volunteered to contribute to a collaborative research project, jointly undertaken by Embry-Riddle Aeronautical University and Honeywell Aerospace. The project sought out students with a strong engineering background and electrical expertise, providing an opportunity to apply engineering knowledge to real-world industry challenges.
- Joined a cross-functional team with the intent to design and implement a knowledge-based system for the fault isolation and correction of inertial navigation systems during the productions testing phase. This experience demonstrated proficiency in cross-disciplinary collaboration and problem-solving within an industrial context.

RELEVANT PROFESSIONAL EXPERIENCE

NASA John H. Glenn Research Center

Cleveland, Ohio

Graphics and Visualization Lab Intern

Aug. 2023 - Present

- Contribute to the development of concept vehicles within a cutting-edge flight simulator, actively engaging in the creation of related visualizations using virtual reality and augmented reality technologies.
- Visualization efforts include the modeling of both conceptual electric aircraft designs and hardware prototypes.

Honeywell Aerospace

Electrical & Systems Engineering Intern

Clearwater, Florida May 2023 – Aug. 2023

• Expanded upon my involvement in the research program by transitioning to a summer internship position at the Clearwater facility.

- Maintained an integral role in the project following this transition, further refining and optimizing the design and implementation of the knowledge-based system.
- Proactively scheduled and conducted frequent meetings with site engineers and technicians, which provided valuable insights into the intricacies of the manufacturing process and ensured a seamless alignment between the system's functionality and the manufacturing requirements.

ERAU Academic Advancement Center

Daytona Beach, Florida

Engineering & Engineering Sciences Tutor

Aug. 2022 – Present

• 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.

HONORS & AWARDS

Dean's List, Embry-Riddle Aeronautical University

Diamond Eagle Scholarship, Embry-Riddle Aeronautical University

Bright Futures Academic Scholarship, Florida Department of Education

Visionary Scholarship, American College Foundation

President's List, Broward College

Dean's List, Broward College

Commended Student, National Merit Scholarship Corporation

(All Terms) Fall 2020 - Present

SKILLS

Programming & Analysis

• MATLAB, Python, C/C++, Arduino, Microsoft Excel

Design & Simulation

• CATIA V5, Autodesk Inventor, Fusion 360, Blender, Femap

Technical

• 3D Printing, Soldering, Circuit Design, Rapid Prototyping

Languages

• English (Native), Spanish (Conversational), French (Basic Proficiency)

References Available Upon Request