Kilian Olen

(954) 661-2679 kilianolen@gmail.com linkedin.com/in/olenk kilian-olen.github.io

Education

Embry-Riddle Aeronautical University **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 & CAD/CAM
- Academic Honors: Dean's List (All terms)

Broward College **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)

Skills

Design: SolidWorks, CATIA V5, Autodesk Inventor, Femap/Nastran, Blender
Programming: MATLAB, Simulink, Python, C, C++
Technical: FDM/SLA Printing, PCB Design, Soldering, Arduino, Rapid Protoyping
Languages: English (Native), Spanish (Conversational), French (Beginner)

Experience

Space and Atmospheric Instrumentation Lab **Feb 2023 – Present**

Undergraduate Research Assistant *Daytona Beach, FL*

- Integrated a Feather M0 microcontroller with a 9DOF IMU to accurately track and monitor a rocket boom spin table.
- Utilized MATLAB and the Arduino IDE to develop a wireless communication system capable of transmitting live IMU readings across LoRa radio modules, improving system efficiency and data accuracy for future experiments.
- Implemented a MATLAB script to parse through individual data packets and export them into a formatted Excel table.

NASA Glenn Research Center **Aug 2023 – Dec 2023**

OSTEM Intern *Cleveland, OH*

- Designed detailed models of the X-66A, an Transonic Truss-Based Wing concept vehicle being developed alongside Boeing under the Advanced Air Transport Technology initiative.
- Developed 3D models and assemblies for ongoing construction efforts aimed at replacing the NASA 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 across NASA centers.
- Volunteered at numerous NASA outreach events, where I played a key role in both informing and inspiring the public about cutting-edge aerospace research and technology.

Honeywell Aerospace **Nov 2022 – Aug 2023**

Electrical & Systems Engineering Intern *Clearwater, FL*

- 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, gaining 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 completed system to facility leaders, highlighting an annual labor reduction of $250,000 for the eTALIN product line and establishing a framework for extending these savings to other product lines.

Projects

Robotic Sumo Competition | *Python, Autodesk Inventor*

- Spearheaded the design and development of an autonomous sumo bot, resulting in a highly competitive robot that consistently performed well in both offensive and defensive scenarios.
- 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 team's design emerged victorious.

RC Car Design and Assembly | *CATIA V5, FDM Printing*

- Designed and fabricated a 1:1 scale RC car in CATIA V5, resulting in a fully assembled and functional model.
- 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.