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# Kilian Olaf Olen

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## **EDUCATION**

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

Bachelor of Science in Aerospace Engineering | Concentration: Astronautics

Bachelor of Science in Engineering Physics | Concentration: Spacecraft Systems

Expected May 2025

GPA: 3.75/4.00

Honors Program

Minors: Applied Mathematics & Computer Aided Design/Manufacturing

**Broward College, Davie, Florida** 

Associate of Arts with Highest Honors in Engineering

Aug. 2018 – June 2020

GPA: 3.94/4.00

## 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

Graphics and Visualization Lab Intern

• Contribute to the development of concept vehicles within a state-of-the-art flight simulator, actively involved in the creation of related visualizations using virtual reality and augmented reality technologies, which entails the modeling of both conceptual electric aircraft designs and hardware prototypes.

# ERAU Space and Atmospheric Instrumentation Lab, Daytona Beach, Florida

Feb. 2023 - Present

Aug. 2023 - Present

Undergraduate Research Assistant

• Actively contribute to multiple research endeavors alongside master's and Ph.D. candidates, harnessing their wealth of knowledge and expertise to deepen my grasp of microcomputers and electronic instrumentation.

# Honeywell Aerospace, Clearwater, Florida

Nov. 2022 - Aug. 2023

Electrical & Systems Engineering Intern/Research Assistant

• Worked within a cross-functional team to design and implement a Knowledge Based System aimed at fault isolation and correction of Inertial Navigation Systems during the production testing phase.

#### 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.

#### **EXTRACURRICULAR ACTIVIES**

White Hat Eagles Cybersecurity Club Embry-Riddle Robotics Association Lunabotics Competition Game Development Club Fall 2021 – Spring 2022

Fall 2020 - Spring 2021

Fall 2020 - Present