

Reagan Elwell

North Ridgeville, OH | reagan1elwell@gmail.com | (440)-241-7438

Education

Embry-Riddle Aeronautical University	Daytona Beach, FL
Bachelor of Science in Mechanical Engineering	May 2028
Area of concentration: Autonomous Systems and Robotics	Minor: Space Operations

Professional Experience

Golf Caddy Elyria Country Club Elyria, Ohio	May 2023 – August 2024
<ul style="list-style-type: none">Quickly rose through ranks, becoming a top-ranking caddy in 2 months.Favored by guests, often being requested by name due to exceptional service.Maintained 0 complaints, frequently complimented for building rapport with guests.	
Golf Coach Medina Country Club Medina, Ohio	May 2019 – August 2022
<ul style="list-style-type: none">Provided coaching assistance to youth summer camps and ensure camp participants had a safe, fun experience.Received exceptional feedback and maintained high satisfaction with parents as camp grew from 10 participants per class to 30	

Undergraduate Research

Shock Cord and Tube Testing Club Involvement Embry-Riddle	August 2025 – Present
<ul style="list-style-type: none">Designing a testing apparatus for Shock Cord analysis and performance evaluation using Autodesk Inventor.Preparing samples of Kevlar for tensile testing, following lab procedures to ensure consistency.Operating the LoCap machine and applied it in the testing processes.	
6 D.O.F Stochastic Hypersonic Flight Simulator Club Involvement Embry-Riddle	August 2025 – Present
<ul style="list-style-type: none">Developing code for hypersonic aerodynamic lift calculations ensuring seamless integration between Python, MATLAB, and Google Sheets API.Conducting testing and refinement of the simulator as development progresses.	

Project Experience

Icarus Sounding Rocket Program Embry-Riddle	August 2024 – Present
<ul style="list-style-type: none">Developing critical components for high-powered and experimental rockets in Inventor and Catia v.5, with additional responsibilities in wiring and system integration.Performed pre-launch tests, assembling rockets for launch, developing standard operating procedures (SOPs), and using Open Rocket to model designs and simulate launch performance.Led a team in modeling components in Inventor for Preliminary Design Review.	
MICRO-G NEXT Challenge NASA Competition	August 2024 – October 2024
<ul style="list-style-type: none">Developed a solution to NASA's Microgravity Operations Soft Good Attachment Device challenge.Designed a reusable cartridge and reloading mechanism for a nail gun mechanism in CATIA v.5.Contributed to drafting and editing the team's technical paper submitted to NASA.	
Catia V.5 Lego Creator Space Shuttle Embry Riddle	August 2024 – December 2024
<ul style="list-style-type: none">Modeled the LEGO Creator 3-in-1 Space Shuttle featuring 62 unique parts and 144 total componentsUtilized CATIA's Part Design, Assembly Design, Generative Shape Design, and Parametric Design to digitally reconstruct the LEGO Space Shuttle	

Skills

Engineering Software and Programming: CATIA v.5, Autodesk Inventor, MATLAB, Open Rocket Python, HTML, CSS

Language: Proficient in Spanish