

# COLBY R. DAVIS

(573) 987-9307, colbyricharddavis@gmail.com, LinkedIn: colbydavisr  
Department of Defense Security Clearance - Secret

## EDUCATION

**University of Central Florida** - Online  
Master of Engineering in Aerospace Engineering

Fall 2025

**Embry-Riddle Aeronautical University** – Daytona Beach, FL  
Bachelor of Science in Aerospace Engineering

Spring 2024  
GPA: 3.3/4.0

## PROJECTS

### Embry-Riddle Aeronautical University Engineering Department

*Guidance, Navigation, and Control (GNC) & Systems Lead* – 12U CubeSat

2023 – 2024

- Created CAD models of propulsion and avionics systems
- Conducted thermal and vibration analyses using ANSYS
- Performed Finite Element Analyses (FEA) for simulated launch g-forces
- Led a team of 5 students through design process adhering to NASA standards compliance

*Lead Mechanical Engineer* – Variable Pitch Propeller

Spring 2024

- Designed propellers tailored for thin Martian atmosphere, focused on maximizing aerodynamic efficiency under extreme conditions
- Conducted stress analysis for flight scenarios in thin atmosphere
- Assembled and integrated propeller system, followed by comprehensive performance and strength testing

*Project Lead* – Satellite Attitude Control System

2023-2024

- Developed Attitude Determination & Control (AD&C) for detumble/orientation using Simulink
- Maneuvered satellite autonomously successfully from point A to B

*CO-Lead* – NASA Micro-G Next Eva Zip-Tie Installer

2023 – 2024

- Actively engaged in hands-on prototyping and performance testing
- Designed parts and GD&T drawings using CATIA
- Drafted mission proposal showcasing design feasibility and operational readiness

## PERSONAL PROJECTS

Pan Tilt Face tracking system

Spring 2024

- Developed human face tracking system using Raspberry-pi and servo motors
- Programmed facial recognition and tracking algorithms in Python
- Designed real-time interface for monitoring and debugging

3D Print Business

2023

- Managed end-to-end production, from CAD-modeling to post-processing, ensuring high quality prints

## WORK

**Anytime Fitness** – Jackson, MO

May 2024 - Current

Assistant Manager

- Perform gym operations, including customer acquisition, equipment maintenance, scheduling, to ensure a positive experience for members

## TECHNICAL

Python, MATLAB, Simulink, NX, Nastran, CATIA

## PROTOTYPING & TESTING EQUIPMENT

CNC mills/lathes, laser cutters, 3D printers (FDM, SLA, SLS, metal additive).

## PERSONAL

Time Management, Leadership, Adaptability, Communication, Motivation, Problem Solving, Critical Thinking, Willingness to Learn