# **Nicholas Orrill**

I aspire to be a lead engineer that manages and oversees projects based on the propulsion aspect of https://www.linkedin.com/in/nicholas-orrill-6a2729244 in



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# Experience

rocket design.

#### **Engineering Intern | Canyon AeroConnect**

Canyon stands as one of the world's leading suppliers of avionic-standard aircraft communications, navigation and audio/intercom systems May 2022 to Aug 2022

- · Reverse engineered a set of drawings to create a SOLIDWORKS CAD model
- Designed a wiring harness for automated testing of ESMCP system
- Completed a project updating outdated drawings and documents, inserted them into the database
- Worked to complete Engineering Change Reports, updated schematic drawings, and created Source **Control Drawings**

#### **Projects**

Embry Riddle Aeronautical University

## Mars Unmanned Aerial Vehicle for Exploration | Senior Design Project

Jan 2022 to Dec 2022

- Researched and designed a 6-rotor surveillance drone to be placed on the Martian surface
- Designed a 1/5th scale Earth based prototype of the 6-rotor drone
- Lead researcher and designers of the Thermal control system
- Research and design of Guidance, Navigation, and Control system

#### Project Lazarus - Propulsion Team | Rocket Development Lab

Aug 2021 to Aug 2022

- · Designed a 72mm solid propellant rocket motor
- Wet winding of a 72mm solid propellant rocket motor with carbon filter filament for hydrostatic testing
- Designed a 6in solid propellant rocket motor

#### Eagle Space Flight Team - Propulsion Team | Undergraduate Research Institute

Aug 2021 to Aug 2022

- Designed and tested 6 inch solid propellant rocket motor
- Designed an 8 inch solid propellant rocket motor

#### **Spacecraft Attitude Dynamics and Control**

Aug 2021 to Aug 2022

- · Designed and tested 6 inch solid propellant rocket motor
- Designed an 8 inch solid propellant rocket motor

### Education

#### **Bachelor of Science, Aerospace Engineering**

**Embry Riddle Aeronautical University** Dec 2022 Prescott, AZ

#### Skills

MATLAB, Simulink, SOLIDWORKS, CATIA V5, ANSYS, ANSYS SCADE Suite, Lab View, Microsoft Office, Google Suite, Mind Manager, Jama Software, Technical documentation.