# **Erick White**

# **Integrity ~ Honesty ~ Collaboration ~ Perseverance**

#### Contact

# **Objective**

(719)-301-8932 erickwhitebusiness@gmail.com

erickwhitedev.aithub.io

Hardworking student seeking an opportunity to learn and grow in a team environment with exceptional interpersonal skills and ability to communicate effectively; hoping to explore the aerospace field (especially astrodynamics and interplanetary research) through both academia and industry.

#### **Education**

#### **Experience**

University of Colorado Boulder

**Engineering Honors Program** Undergraduate (Class of 2026) Major: Aerospace Engineering Minor: Computer Science Minor: Applied Mathematics

GPA: 4.0

Undergraduate Research Assistant (August 2024 – Present)

- Researching and developing methods for mass-generating spectrograms from Van Allen Probe magnetometer data capable of clearly showing plasma wave events
- Investigating effectiveness of using machine learning models to detect plasma wave events in Earth's magnetosphere

NASA CARA Analysis Intern (May 2024 – August 2024)

- Continued work from summer 2023 internship researching and developing a new method of visualizing satellite conjunction events
- Researched and developed tool for beyond-near-Earth orbital propagation
- Wrote 26-page paper on conjunction visualization for submission to AIAA/AAS ASC NASA CARA Analysis Intern (June 2023 – August 2023)
  - Developed new and expanded upon existing unit tests for NASA's CARA SDK
  - Developed a new highly customizable visualization program for satellite conjunction events to be used by CARA in training and mission analysis

## **Key Skills**

# Communication

Bilingual (English/Italian) Semi-fluent in Spanish

Programming Experience (MATLAB, C++, Java, Python)

CAD/CAM (SolidWorks)

LaTeX

SP/2 Machining Certified

NASA CARA Analysis Team Presenter – A Showcase and Comparison of Three Methods for Visualizing Near-Earth Satellite Conjunction Events (August 2023)

- Presented results of several months of research and development into satellite conjunction visualization building on previous work and incorporating various new methods and techniques
- Presented visualizations of several conjunctions of interest with unique geometries NASA CARA Ops Team Special Topics Presenter – Visualizing Conjunction Events Using Monte Carlo Animations (August 2023)
  - Presented results of several weeks' worth of research and development into a new method for visualizing satellite conjunction events
  - Demonstrated utility of new tool for previously un-visualizable conjunction events
  - Presentation led to discussion of use for tool in a large-scale environment and eventual public release

#### References

[Available upon request.]

### Leadership

University of Colorado Boulder:

- Outreach Lead CU Astronomy Club 2022-Present
- Recitation Leader Critical Encounters Fall 2023