# **Erick White**

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

#### **Contact**

(719)-301-8932

**Education** 

<u>erickwhitebusiness@gmail.com</u> <u>erickwhitedev.github.io</u>

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**Objective** 

University of Colorado Boulder

Engineering Honors Program
Undergraduate (Class of 2026)
Major: Aerospace Engineering
Minor: Computer Science
Minor: Applied Mathematics
GPA: 4.0

Thomas B. Doherty High School Class of 2022 – Valedictorian GPA: 4.6389 (4.0 unweighted)

### **Key Skills**

Bilingual (English/Italian) Semi-fluent in Spanish

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

CAD/CAM (SolidWorks)

LaTeX

SP/2 Machining Certified

#### References

[Available upon request.]

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.

Hardworking student seeking an opportunity to learn and grow in a team

### **Experience**

Omitron 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

Interdisciplinary Contest in Mathematical Modeling (February 2023)

- Researched and developed an algorithm to prioritize the United Nation's Sustainable Development Goals for maximum impact in the next decade
- Wrote a 25-page paper analyzing methods (weighted undirected graph model), sensitivity analysis (proof that algorithm developed is not chaotic), and analysis of meaning and applicability of results
- Earned Honorable Mention on report (top 30% of papers in category worldwide)
- Paper published in University of Colorado 2024 Honors Journal

Volunteer, Colorado Springs Astronomical Society (2013 – 2023)

 Public STEM outreach work, including presentations, operating telescopes for public use, and interactive demonstrations

#### Communication

NASA CARA Ops Team Special Topics Presenter – *Visualizing Conjunction Events Using Monte Carlo Animations* 

- 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

2023 SIAM Front Range Student Conference – We Put the "UN" in "FUN": The Mathematical Guide to Saving the World

- Presented method and results used in 2023 Interdisciplinary Contest in Modeling entry (prioritizing United Nations Sustainable Development Goals using a weighted graph model to predict goal achievement success in the future)
- Received well by both other students and by professors

#### Leadership

University of Colorado Boulder:

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