# **Erick White**

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

#### **Contact**

(719)-301-8932

Education

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

University of Colorado Boulder

Undergraduate (Class of 2026)

Major: Aerospace Engineering

Thomas B. Doherty High School

Class of 2022 - Valedictorian

GPA: 4.6389 (4.0 unweighted)

Boulder, Colorado, USA

Minor: Computer Science

Minor: Applied Mathematics

**Experience** 

**Objective** 

Omitron NASA CARA Analysis Intern (June 2023 – August 2023)

science field and eventual work as a NASA astronaut.

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

environment with exceptional interpersonal skills and ability to communicate

effectively; hoping to gain experience for future work in an aerospace or computer

- 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

Honorable Mention, Interdisciplinary Contest in Mathematical Modeling (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)
  Volunteer, Colorado Springs Astronomical Society (2013 2023)
  - Public outreach work, including presentations, operating telescopes for public use, and interactive demonstrations

# **Key Skills**

GPA: 4.0

Bilingual (English/Italian) Semi-fluent in Spanish

Programming Experience (Java, Python, HTML+CSS+JS, MATLAB, C++)

CAD/CAM (SolidWorks, Inventor)

LaTeX

#### **Communication**

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

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

### References

[References available upon request.]

## Leadership

University of Colorado Boulder:

Outreach Lead – CU Astronomy Club – 2022-Present

Thomas B. Doherty High School:

- President National Honor Society 2021-2022
- President Aerospace Club 2020-2022