

# Erick White

**Integrity ~ Honesty ~ Collaboration ~ Perseverance**

## Contact

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## Education

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.]

## Objective

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.

## 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)

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