HALEY BOSWELL

Education

Santa Monica College

Jan 2022 - Present

Astrophysics (for transfer)

Santa Monica, CA

Relevant Coursework

• C Programming

• C++ Programming

• Multivariable Calculus

• Linear Algebra

• Differential Equations

• Mechanics

• Modern Physics

• Waves and Optics

• Electricity and Magnetism

Experience

UCLA Break Through in Tech

May 2024 - Present

Los Angeles, CA

AI/ML Fellow

• Completed a comprehensive machine learning course provided by eCornell.

• Developed a variety of supervised and unsupervised learning models using tools such as scikit-learn to analyze real-world datasets.

Caltech
LIGO SURF Intern

June 2023 – August 2023

Pasadena, CA

• Worked on improving detection methods for gravitationally-lensed gravitational waves in the GstLAL search pipeline.

• Implemented Bayesian methods to better distinguish signal from noise using the relevant parameters' combined likelihood ratio.

 Authored and presented a paper titled Believe It or Not: Incorporating Relative Time Delay and Magnification Distributions Predicted by Lens Models into Ranking Possible Sub-Threshold, Strongly-Lensed Candidates.

Technical Skills

Languages: Python, C, C++, SQL

Developer Tools: Jupyter Notebook, VS Code, Xcode, PyCharm, GitHub, Command Line Interface (CLI)

Leadership / Volunteer

Boundless Brilliance

October 2022 - December 2023

Program Coordinator

• Developed STEM experiments focused on elementary science education and diversity outreach in line with California's NGSS

• Facilitated interactive STEM activities at public events.