Moises Mata

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Education

Undergraduate Student, Columbia University

September 2022 - Present

GPA: 3.79

Primary Major: Computer Science-Mathematics

Secondary Major: Physics

Past Coursework: Multivariable/Vector Calculus, Linear Algebra, Ordinary Differential Equations, Data

Structures and Algorithms, Computer Science Theory, Systems Programming

High School Diploma, Corona High School

August 2018 - June 2022

GPA: 4.78

Graduated as Valedictorian in a class of 488

Experience

Columbia University Department of Astronomy - Researcher December 2022 - July 2023

Worked with Professor Kathryn Johnston in the study of Milky Way Stellar Streams. Using data from surveys Gaia and Pan-STARRS, I analyzed the substructure of the Ophiuchus stream and created multiple simulations to postulate initial conditions of the structure's formation

Columbia University Center for Student Advising - Calculus Tutor September 2023 - Present Calculus I tutor for undergraduates at Columbia. Would track students' progress and specific needs to tailor lessons best for them and their test preparation.

Columbia Space Initiative - S.U.I.T.S Mission Co-Lead

September 2023 - Present

Mission Lead for SUITS Mission which is under the umbrella of the Columbia Space Initiative — Columbia's largest engineering club. The SUITS mission focuses on developing an AR application to aid Astronauts on future spacewalks. We participate in the NASA SUITS Challenge, in which we create a proposal for said application. Our proposal was one of 17 chosen by NASA, and we are currently working on developing this application to have our design reviewed by NASA engineers this summer at Johnson Space Center in Houston.

Technical Skills

Programming Languages

- C, Java, Python, C#, C++

Systems Programming

- Past Projects: 3 Tier Architecture Web-Server, Database Lookup Program, HTTP Client Downloader