Jordany Acosta Capellan
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EDUCATION

Columbia University in the City of New York |New York, New York   Expected Graduation - May 2026
|B.S. Electrical Engineering |Minor: Mechanical Engineering

RELEVANT COURSEWORK

- Multivariable Calculus, Linear Algebra, Ordinary Differential Equations, Mechanics, Intro to Electrical Engineering, Materials and Processes in Manufacturing, Structural Design, and Machining.
- Computing for Engineers and Applied Scientists (Python), Foundations of Data Science (Python), and Computer Graphics and Design (Solidworks).

Emerging Scholars Program (COMS 1404)   January 2022 - May 2022
Columbia University | New York, New York

- Developed proficiency in: Algorithmic Thinking, Natural Language Processing, Human-Computer Interaction, Cryptography, Graph Theory, Social Network Analysis, Machine Learning, and Computer Vision.

PROFESSIONAL EXPERIENCE

Humanscale   June 2023 - August 2023
New York, New York
Design Engineer Intern

- Developed engineering drawings that communicate necessary information for manufacturing and assembly.
- Used CAD software, to develop 3D models of parts in 3 assemblies.
- Managed the construction of 3 prototypes.
- Executed test plans to evaluate product performance and reliability.

Columbia University Academic Success Programs (ASP)   June 2022 - September 2022
New York, New York
Guidance Counselor

- Mentor, residential advisor, tutor, and events manager for Columbia University's Summer Bridge Program.
- Guided 30 freshman students from minority and low-income backgrounds in preparation for their first year.
- Managed workshops and hosted physics tutoring sessions for the students.
- Supervised residential dorms and maintained a safe, supportive, and welcoming environment for the students.

LEADERSHIP AND CAMPUS INVOLVEMENT

Cooling Hardware Project Leader (CUFR)   June 2023 - September 2023
Columbia FSAE | New York, New York

- Manufactured the cooling team's brass fittings using a Lathe CNC machine.
- Improved the cooling loop for formula car using temperature and pressure sensors with C programming language.
- Designed cooling loop for formula car using SOLIDWORKS.

NASA RASC-AL Project Leader   May 2022 - April 2023
Columbia Space Initiative | New York, New York

- Guided an interdisciplinary team of 15 engineering, economics, and political science students.
- Organized subteams to develop an engineering device based on a NASA challenge.
- Developed 3D models for the NASA design challenge.

Rocket's Airframe and Combustion Chamber Project Leader   September 2021 - May 2022
Columbia Space Initiative | New York, New York

- Manufactured the rocket's injector using Solidworks CAM and a Lathe CNC machine.
- Designed and 3D printed the rocket's boattail and camera shroud.
- Water-jetted and carbon fiber wrapped the fins of the rocket.

SKILLS AND INTERESTS

- **Software:** Python, SOLIDWORKS, MATLAB, MS Office, LTspice, KiCad, and LaTeX.
- **Hands-on:** Soldering, Laser Cutting, Waterjet, Lathe, Drilling, Milling CNC machining, and 3D printing.
- **Organizations:** Institute of Electrical and Electronics Engineers (IEEE), American Society of Mechanical Engineers (ASME), Society of Hispanic Professional Engineers (SHPE), Black-Pre Law Society, Columbia University FSAE (CUFR), Columbia Space Initiative (CSI), and Columbia University Tennis Club.
- **Volunteering:** Columbia University Science Olympiad and Sophie Gerson Healthy Youth.
- **Interests:** Tennis, Bodybuilding, Ultrarunning, and Guitar. | **Languages:** Fluent in Spanish.