DIEGO MIGUEL REYNOSO RAMOS

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EDUCATION

University of California, Los Angeles (UCLA)

Pursuing B.S., Aerospace Engineering | GPA 3.8

Los Angeles, CA

Expected June 2027

East Los Angeles College (ELAC)

Monterey Park, CA

June 2024

AS., Mathematics | GPA 3.6

TECHNICAL EXPERIENCE

UCLA Energy and Propulsion Laboratory

Los Angeles, CA

Undergraduate Researcher May 2025 - Present

- Collected and analyzed shear-layer velocity data via hot-wire anemometry, using MATLAB to evaluate turbulence and jet interactions for airbreathing engine applications.
- Designed and modeled custom calibration and measurement components in CAD (FUSION) to improve accuracy and efficiency of experimental setup.

Design Build Fly (DBF)

Los Angeles, CA

CAD, Aerodynamics, and Structures Subteams member.

May 2025 - Present

- Performed multiple ANSYS FEM simulations on components and executed static/strain tests to validate models.
- Ran CFD studies in COMSOL/SIMSCALE to characterize flow and compute aerodynamic loads; validated results against wind-tunnel/field data
- Modeled aircraft components in SolidWorks for assembly and fabrication.

Rocket Project Los Angeles, CA

Team Lead

August 2024 - November 2024

- Led a 3-person team in the design—build—test cycle of a G-class rocket, coordinating fabrication, integration, and launch
 operations
- Designed and manufactured flight-tested nose cones, fins, and bodytube in SOLIDWORKS, fiberglass/epoxy and carbon fiber layups

Mars Rover Project, 2024 UCLA HAck Competition

Los Angeles, CA

Manufacturing Lead

July 2024 - July 2024

- Developed a remotely controlled rover equipped with a working camera along with humidity, temperature, and ultrasonic sensors, all accessible through a custom-built website.
- · Designed and fabricated chassis, claw, and arm mechanisms for payload retrieval.

WORK EXPERIENCE

MESA at East Los Angeles

Monterey Park, CA

Lead Mathematics Tutor

March 2023 - September 2024

- Tutored university level Mathematics, Chemistry, and Physics, collaborating with staff to aid student success.
- Guided group tutoring sessions for up to 8 students in Physics, facilitating collaborative problem-solving.

McDonald's Huntington Park, CA

Shift Lead

August 2022 - July 2024

• Supervised 10+ employees per shift; trained new staff on workflow, and oversaw daily transactions (~\$15K).

RELEVANT COURSEWORK

• MATLAB Programming, Introduction to Astronautics, Analysis of Aerospace Structures, Flight Mechanics, Stability, and Control of Aircraft, Thermodynamics, Transport Phenomena, Fluid Mechanics, Aerodynamics, Circuits, Materials Science, Statics, Strength of Materials, Dynamics.

SKILLS

Skills: CAD: SolidWorks/Onshape/Fusion, CFD: COMSOL/SimScale, FEM: Ansys, Arduino, HTML/CSS, 3D Printing, Laser Cutting, Machining, Fiberglass Fabrication, Soldering, Mechanical Design, Prototyping, and Teamwork.