

# Benjamin Luftig

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(415)-827-5276

TECHNICAL EXPERIENCE

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## Skills:

Programming & Design: Matlab, Python, R, Java, Arduino, SolidWorks

Project Management: Microsoft Office Suite, Google Suite, Time Management

Robotics & Mechanisms Laboratory, ROMELA

**Undergraduate Researcher** 2024-Present

- Designed, built, and tested chassis designs and testing apparatus to create a spring-cable system that minimized interference for testing a monopod robot
- Iterate on a secure fastening system for the power delivery system and accompanying hardware

Rocket Project

**Prometheus Ground Systems Lead** 2023-2024

**Ares Ground Systems Member** 2024-Present

- Lead record breaking team, reaching 14000 feet and 3 hot fires
- Responsible for the planning, development, and creation of the Ground Systems for a hybrid rocket
  - Cut costs by 30%, integrated pneumatics system to fill table, while minimizing pressure losses and allowing for modularity
  - Transitioned the system from NPT to AN fitting to minimize cost and simplify leak checks
- Organized a team to complete tasks while making accommodation for academics and budget

The American Society of Mechanical Engineers, Fabrication and Design Essentials

**Member** 2023-2024

**Mentor** 2024-2025

- Mastered CAD and other design systems to create detailed models
- Presented projects to industry officials and used feedback to iterate on designs
- Organized and taught fellow students engineering basics such as CAD, soldering, and 3D printing

X1 Robotics

**Power Systems Subteam Lead** 2023-2024

- Budgeted, and designed power systems for an autonomous quadruped
- Created a standardized testing setup for motors quantifying power-usage, weight, and cost

**Chassis Subteam Lead** 2025-Present

- Led team to design the propulsion, actuation, and shell of a spherical robot
  - Modeled spherical motion, magnetic calculations, and material simulations

EDUCATION

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University of California, Los Angeles

*Aerospace Engineering Major*

Junior (GPA: 3.4)