

Shannon Comstock

818-212-5736 | shannon.a.comstock@gmail.com | www.linkedin.com/in/shannon-comstock

EDUCATION

Northern Arizona University

Bachelor of Science in Mechanical Engineering with a minor in Astronomy

Flagstaff, AZ

September 2016 - May 2024

- Cumulative GPA: 2.9
- Honors: Dean's List Fall of 2018 and 2021
- President of NAU Trail Riders Club 2021-2022

Pasadena City College

Bachelor of Science in Astrophysics

Pasadena, CA

September 2018 - July 2021

- Cumulative GPA: 3.2
- Vice President of Astronomy and Physics Club

WORK & LEADERSHIP EXPERIENCE

NAU Rocket Propulsion Senior Capstone

Project Manager and Team Lead

Flagstaff, AZ

September 2023 - May 2024

- Led a team of 6 engineers in the development of a 75 mm rocket motor for a 3-meter tall rocket.
- Designed and optimized a unique ammonium perchlorate propellant formula for the rocket motor.
- Oversaw the design, machining and wiring of a rocket motor test stand used to measure impulse and thrust during the motor grain testing phases.
- Assigned specific tasks to each team member to cover all rocket design subsections, allowing for a smooth integration of the final rocket motor assembly.
- Managed project timeline and milestones over the course of the year-long project, coordinating efforts towards the successful completion and launch of the rocket.

Discount Tire Corporation Headquarters

Mechanical Engineer Intern

Scottsdale, AZ

May 2022 - June 2023

- Designed and tested innovative solutions for dually truck hubcap removal and tire repair shelf organization using SolidWorks CAD modeling, 3D printing and in lab testing.
- Coordinated with manufacturers to produce and distribute the designed solutions to Discount Tire stores.
- Worked with patent attorneys to submit a patent application for the final hubcap removal tool, currently patent pending.
- Implemented these final design solutions into Discount Tire stores nationwide.

NASA L'Space Academy

Team Leader

Pasadena, CA

May 2020- August 2020

- Initiated the creation and submission of a formal proposal to NASA for a new spacecraft technology, while guiding a team of 4 engineers in the design of an Aluminum-Graphene Composite Radiator for Spacecraft

NASA Community College for Aerospace Engineers at JPL

Team Lead and Project Manager

La Cañada, CA

December 2019 – February 2020

- Led the design and construction of a miniature Mars rover, integrating specialized tools for testing on Martian terrain.
- Consulted with mechanical engineers to optimize the rover's energy efficiency and instrument functionality.

Project Selene

Team Member

La Cañada, CA

September 2015- May 2016

- Developed the concept of a satellite designed to power itself using only solar power while calculating the satellite's orbital path using Kepler's Laws.

SKILLS, ACTIVITIES, & INTERESTS

Skills: Microsoft Excel, SolidWorks, C++, Matlab, Ansys

Interests: Systems Engineering, Quantum Physics, Theoretical Physics, Engineering and Design, Project Leading, Motocross, Equestrian, Dance