

Andrew Estrada

andrewgestrada@gmail.com ❖ (661) 299-8302 ❖ andrewgestrada.com

EDUCATION

Northern Arizona University

Aug. 2020 – May 2024

B.S, Mechanical Engineering

Flagstaff, AZ

- NAU Founders Gold Scholarship
- Member of, Formula SAE, SAE Baja, Space Jacks, and ASME

WORK EXPERIENCE

University Marketing- Northern Arizona University

Nov. 2023 – Present

Digital Marketing Assistant

Remote

- Collaborated in website development and maintenance, improving UX and performance.
- Conducted SEO analysis, implementing strategies to enhance search visibility and organic traffic.
- Developed and utilized custom tools in Python, leveraging REST APIs for data extraction and performance analytics.

Parker-Meggitt- US Safety Systems

July 2023 – Aug. 2023

Manufacturing Engineering Intern

Simi Valley, CA

- Designed and implemented innovative fixtures to enhance process safety and ergonomics, resulting in increased efficiency, productivity, and adherence to LEAN manufacturing
- Collaborated with design engineers to conduct failure analyses and implement effective corrective actions
- Provided invaluable assistance to production personnel by updating and clarifying work instructions, optimizing production processes and ensuring smooth operations

Accu-Glass Products, Inc.

May 2022 – Aug. 2022

Engineering Intern

Santa Clarita, CA

- Responsible for operating Haas CNC Mills and Lathes to complete components for capital projects
- Created CAD models and technical drawings for products, supported work holding design and manufacturing processes
- Initiated precision quality control and effectively took precise measurements to ensure effective tolerance for high-accuracy air to high and ultra-high vacuum parts

RELEVANT PROJECTS

- **Formula SAE:** *Northern Arizona University* April 2023 – May 2024
 - Front Pushrod Suspension Lead, responsible for design, validated geometry within LOTUS Suspension Shark, utilized ANSYS to simulate driving conditions, collaboration with chassis team for successful integration
 - Manufactured Front Pushrod Assembly utilizing CNC Mill and Lathe, programming with Mastercam
 - Team Test Engineer responsible for test planning, data acquisition and analysis (DAQ), evaluating design choices and vehicle dynamics against lap simulations to suggest car setup changes.
 - Co-founder; handling sponsor relations, new member outreach, website development, and social media
- **NASA Student Launch Competition:** *Northern Arizona University* Fall 2022 - Spring 2023
 - Designed and tested GPS subsystem, assisting with avionics integration, programming, and troubleshooting.
 - Conducted rocket performance simulations in Open Rocket to validate flight dynamics and optimize stability.
 - Analyzed and optimized stage ejection methodology for a reliable recovery system.
 - Served as safety officer, ensuring compliance with NASA competition regulations and enforcing safety protocols.
- **Eagle Scout Project:** *Boy Scouts of America* Fall 2019
 - Created community service project in partnership with the city of Santa Clarita, California, over a course of one year, fundraised, designed utilizing CAD, presented to local businesses and led 50+ volunteers in the renovation and beautification of Haskell Canyon Open Space

SKILLS & INTERESTS

- **Technical Skills:** SolidWorks; ANSYS; MATLAB; Mastercam; Python; Fusion 360; Inventor; Microsoft Office Suite
- **Manufacturing Skills:** Haas 3-Axis CNC Mill and 2 & 4-Axis Lathe Experience; FDM 3D Printing; LSSS
- **Interests:** Mountain Biking; High Power Rocketry; Sound Systems and Acoustics; Cars; Backpacking; Travel