Alex Stefany

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CAREER OBJECTIVE

Mechanical engineering student with hands-on experience in design, prototyping, and manufacturing, seeking a full-time engineering role to contribute to innovative product development.

EDUCATION

University of California, Irvine September 2022 - March 2026

Bachelor of Science Mechanical Engineering (GPA 3.81/4.00)

Minor in Accounting

- University of California Regents Scholar, Tau Beta Pi Engineering Honor Society Initiate, VP Sigma Phi Epsilon Fraternity, 8 Consecutive Quarter Dean's Honors List
- Fall 2024 semester at the Alma Mater Studiorum Universita Di Bologna, Italy

ENGINEERING PROJECT EXPERIENCE

SAE Anteater Formula Racing, Irvine, CA July 2023 - Present

Powertrain Design Engineer

- Developed a lightweight intake plenum that maximized peak RPM performance by iterative CFD in Ansys Fluent and implementing a composite 3D printing process
- Utilized SolidWorks CAD modeling and Ansys Fluent simulation to enhance the fuel system's performance, reducing slosh by 31% and weight by 12%,
- Performed cost-benefit analysis on fuel tank aluminum alloy choice, along with producing in-house or outsourcing to ensure the best performance with the lowest manufacturing cost. Completed in-house machining for fuel tank.

Tesla, Austin, TX January 2025 – June 2025

Engineering Program Management Co-Op

- Lead time critical Cybercab projects across the manufacturing, factory engineering, and vendors by facilitating design reviews, managing program schedule/budget, and actively working to resolve technical challenges
- Developed an engineering drawing analysis program using a combination of Python and VBA, saving the EPM team 200 hours of manual data entry and calculations per year
- Identified problem with open number of manufacturing design clashes within the factory, within one month was able to reduce design clashes by 41.8%, resulting in less time wasted during equipment installation

US Army Corps of Engineers, Los Angeles, CA June 2024 - August 2024

Design Engineering Intern

- Contributed to the $44 million Murrieta Creek channel design by gathering and processing design data, which was used in the creation of models in AutoCAD.
- Excelled in Army leadership and risk management courses, demonstrating strong decision-making skills; passed government personal security investigation.

SKILLS

Computer: Certified SolidWorks Professional, AutoCAD, MATLAB, Python, Microsoft Office, Ansys Fluent Simulation, KiCad PCB

Manufacturing: Mill and Lathe Manufacturing, CNC Machining, MIG Welding, 3D Printing, Geometric Dimensioning and Tolerancing

Leadership: Conflict Resolution, Problem-Solving, Decision Making, Communication, Strategic Planning