

# Alex Stefany

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## CAREER OBJECTIVE

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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

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**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

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**Bounds Mills, Los Angeles, CA** June 2025 - Present

Manufacturing Engineer

- Developed models and drawings for 8 pepper mill models. Implemented design for manufacturing including draft angles, uniform wall thickness, and ribbing, reducing tooling complexity and scrap rates
- Applied GD&T (true position, flatness, concentricity) to critical mating features of mill components, enabling the factory to hold tight tolerances during machining and ensuring reliable assembly and long-term equipment performance.
- Reduced tooling and mold requirements by designing common parts that worked across multiple mill models and reducing individual parts in each model, cutting overall part count and lowering production costs

**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

**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% compared to previous model
- 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

## SKILLS

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**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