

# VISUD CHANG

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**OBJECTIVE STATEMENT:** Aerospace Engineering student with interests in GNC, propulsion systems, simulations, and applications of AI. Currently seeking internship opportunities to contribute to innovative projects in the industry.

## EDUCATION

**University of California, Berkeley**, August 2023–May 2027, B.S. in Aerospace Engineering, Minor in Electrical Engineering and Computer Science. GPA 3.97/4.00.

Relevant Coursework: Calculus, Physics (Mechanics, Electricity and Magnetism), Solid Mechanics, Computer Science (Python, MATLAB, Java), Statistics and Data Analysis, Aerospace Design, Materials Science, Electrical Engineering, Orbital Mechanics, Propulsion Fundamentals, UAVs

**Long Beach Polytechnic High School**, PACE magnet program, graduated June 2023. Honors/awards: Math Department Pursuit of Excellence Award, AP Scholar with Distinction, Instrumental Music Pursuit of Excellence Award (Jazz and Orchestral), PTA Reflections Music Composition 2nd place in California. Highest Honors, GPA 4.46/4.00

## PROJECT EXPERIENCE

**Space Technologies and Rocketry (STAR)**, Berkeley, CA, Sept 2023–present, *Capacitive Fill Sensor Lead, Airframe and Propulsion Engineer*

- Optimized the fin shape for UC Berkeley's first liquid engine rocket using python software, ran simulations on drag using Ansys, increasing projected altitude by 15% while maintaining stability
- Led a team of 5 to design STAR's first capacitive fill sensor for our third liquid engine rocket, utilizing CAD and PCB design to measure tank fill levels with greater accuracy, optimizing fuel to oxidizer ratio and thrust rate to increase apogee by a projected 5%
- Utilized SolidWorks to design the liquid oxygen tank mounts for the propulsion system of liquid engine rocket
- Led simulations research to ensure structural integrity able to withstand ignition and parachute deployment, resulting in the successful launch of Berkeley's first recoverable liquid engine rocket in May 2024
- Designed and built the body of solid motor rocket, collaborating with a team to achieve a successful launch in November 2023

## PROFESSIONAL EXPERIENCE

**Salas O'Brien**, Corona, CA, June 2024–August 2024, *Mechanical Intern*

- Designed, developed, and reviewed the HVAC systems of over 20 buildings using AutoCAD and Revit
- Modeled 4 multi-level buildings and simulated airflow and cooling rates to improve rates while minimizing cost

## LEADERSHIP EXPERIENCE

**American Institute of Aeronautics and Astronautics**, Berkeley, CA, June 2024–present, *Professional Development Committee Chair and Speaker Coordinator*

- Organized and led resume workshops, intern panels, and mock interviews to prepare 30+ students for jobs
- Led networking events with professionals from multiple industries, inviting them to speak for the AIAA

**Drawn to Scale A Cappella**, Berkeley, CA, Sept 2023–present, *Music Director*

- Led rehearsals, developed timelines, and coordinated socials to improve musicality and teamwork
- Wrote arrangements and directed set for ICCA competition, becoming semifinalists

**Unhoused Songwriting Campaign**, Long Beach, CA, Nov 2021–present, *Songwriter and Affordable Housing Activist*

- Interviewed homeless individuals and wrote songs about their lives, performing at 10+ housing events for over 500 community members and housing authorities such as mayors and congresspeople to influence policy and overcome negative stereotypes about the homeless

## SKILLS

Technical: Python, MATLAB, Java, SolidWorks CAD and Simulations, Ansys, OpenRocket, RocketPy, RasAero, AutoCAD, Revit, Trane Trace 3D, Microsoft Office