

Alex Henin

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Aerospace Engineering undergraduate seeking internship opportunities with companies inspiring in mission and ambition. Hands-on experience in fluid propulsion systems, CNC, manufacturing, and quality assurance. Looking to put extensive CAD/design skills and intuition to good use in companies working towards a brighter future.

EDUCATION

CAL STATE LONG BEACH (CSULB) | MAJOR: Aerospace Engineering Graduating Spring 2029

PROVIDENCE HIGH SCHOOL | AWARDS: Valedictorian Graduated Spring 2025

TECHNICAL SKILLS

CNC Machining, 3D Printing/Slicing, Rapid Prototyping, First Principles Engineering, Java, Python, Fusion 360, Matlab, Onshape, Solidworks, Blender, 3D Rendering, Microsoft Office, Excel, Strong Interpersonal Skills

EXPERIENCE

Beach Launch Team – Fluids and Propulsion – Long Beach, CA August 2025 – Present

- Engineered fluid systems and rocket engines for a cryogenic LOX and kerosene liquid-fueled rocket.
- Validated system integration and combustion stability by executing a successful hot-fire of the LR-101 engine under flight conditions and producing 800 pounds of thrust
- Led waterflow testing to characterize pressure drop, mass flow rate, and CV of system

IPT (Integrated Procurement Technologies) – QA Specialist – Goleta, CA June 2024 – August 2024

- Reduced parts turnaround time and improved contract clarity by leading a complete overhaul of the backend documentation system.
- Inspected aerospace and defense components for FMS, DCS, USG, and OEM clients, ensuring 100% compliance with required documentation to prevent part rejections.

Riviera Robotics – CNC/General Technician – Goleta, CA October 2021 – December 2021

- Fabricated precision components for F.I.R.S.T. competition robots using CNC machinery.
- Repaired robot and made replacement parts to maintain performance under time pressure.

Kids Helping Kids – Chief Financial Officer – Santa Barbara, CA September 2023 – February 2025

- Managed revenue streams, budgets, and backend (payments, website, etc) for 100% student-run nonprofit
- Led complete sell out of +2,000 seat theater and raised +\$80,0000 in net profit that went directly towards fighting human trafficking and supporting vulnerable children globally. ([Article](#))
- Founded and led the team behind “Call to Give” initiative, raising \$20,000

PROJECTS

ROCKET IGNITOR January 2026

- Developed a reusable e-match mandrel, replacing a single-use disposable system by designing a three-pronged mechanical interface that precisely centers the e-match within the combustion chamber.

NFC BRACELETS January 2024

- Made 300 NFC-enabled bracelets and a custom website to host and share stories of rescued children.

DISASTER RELIEF INFRASTRUCTURE PROJECT June 2023

- Rebuilt university and provided disaster relief on Guam and nearby islands from worst hurricane in 20 years
- Manufactured 4 20ft steel light poles; performed structural analysis to ensure stability against wind loads.