

An enthusiastic student of aerospace engineering and computer science at CU Boulder. Growing up, I taught myself the skills to restore sailboats and old cars, gaining hands-on experience and a deep appreciation for the mechanics behind functional design. I aim to leverage my technical skills to contribute to innovative projects and make a meaningful impact in the aerospace and technology fields.

Education:

High School

Hawai'i Preparatory Academy (2020-2022)

- Graduated in the top ten of the class with a GPA of 4.35.
- Admitted to *Cum Laude Society*.
- Awarded "Positive Divergence Award" and "Engineering Award" for academic achievements.

Undergraduate

University of Colorado Boulder (2022 – 2026)

- Majoring in Aerospace Engineering Sciences.
- Majoring in Computer Science.

Skills:

Python, C++, Raspberry Pi, Linux Systems, Git, Docker, Arduino, Particle, SolidWorks, Onshape, PCB Design, Car Mechanics, Advanced SCUBA / Freediver

Fluent in Spanish

Experience:

UC Berkeley Artificial Intelligence Research Lab

Berkeley, CA

Summer Intern / Researcher

June – August 2023

- Trained a team of graduate-level electrical engineering students to build and configure a Linux install on six powerful computers capable of training advanced neural networks.
- Worked on a team with post-graduate students researching how AI can affect the world's food production. We presented our research to the Alpha Garden team, an autonomous polyculture garden located in Berkeley, CA.

Neighborhood Tutoring

Mill Valley, CA

Math and Computer Science Tutor

April 2024 - January 2025

- Tutored Algebra -> Calculus to middle schoolers and high schoolers.
- Tutored Python, Java Script, C++ for highschoolers.

Pau Pizza

Waimea, HI

Cook & Server

November 2021 – June 2023

- I worked my way up from being a dishwasher to a cook and then working the front of the house as a server.
- Filled out the closing documentation every night and handled all the money.
- Wrote documentation on all closing procedures for future employees.

Projects:

- Designed and built a bouldering wall in **Phnom Penh** that serves the community and school kids at the Cambodian Children's Fund.
- Fixed up a 1968 Colombia 22' that would then go on to sail 1000+ miles before being sold to a new owner.
- Developed a token trading framework on the Solana Block Chain that can monitor the market and integrate with third party apps. **(Python)**
- Trained a custom instance segmentation AI model on thousands of images to integrate with an indoor rock-climbing app. **(Python, Google Colab)**
- Developed a multithreaded GUI for large inventory e-commerce sites to optimize product names and descriptions at scale using LLMs. **(Python, API frameworks)**
- Developed a Python package that integrates with the school's dining service API, enabling seamless menu deployment across third-party applications. **(Python, API frameworks)**
- Created a 1,500+ line program to solve complex physics problems, including kinematics, energy, momentum, and projectile motion. **(TI-BASIC)**
- Built an offline Arch Linux package to efficiently browse the Arch Wiki, providing critical technical support during connectivity outages. **(Python)**
- Developed a Raspberry Pi script to process accelerometer and gyroscope data, offering real-time motion insights for ski racers. **(Python)**
- Created a physics engine simulating planetary motion, later expanding it into a game where users control rocket thrust to reach other planets. **(Python)**
- For my high school capstone, I recycled a treadmill to build a compost sifting machine that converts raw compost into rich, usable soil. **(Python, wiring)**
- Developed a central control system for a walk-in freezer/fridge at Jacob Springs Farm, including hardware and software for precise temperature management. **(C++, Arduino, Python, Electronics, PCB design)**
- Set up a home server running various Docker containers, with self-hosted VPN for remote Wi-Fi support, DHCP management, and other parallel services. **(Linux, Python, Docker)**

Hobbies:

- Indoor / Outdoor Rock Climbing
- Sailboat Restoration
- Car Mechanics
- Advanced SCUBA / Freediving
- 1750+ ELO on chess.com
- Tennis