

I am based out of California, and I have a diverse and wide passion for engineering and computer science. I have experience with Linux and Python software programming. I am self-taught and I have used the internet to teach myself these vital programming languages. With the use of these tools, I have implemented multiple projects across a variety of applications.

Beyond software engineering, I fix cars and boats, with a specialization in wiring and electronics. I enjoy working with people and I have worked in the restaurant industry as a chef, as well as on a construction team; I consider myself a team player. As I move on to the next chapter of my life at University of Colorado Boulder as an Aerospace Engineering Major with a Minor in Computer Science, I hope to continue pursuing my interests and expanding my experience and education.

Education

High School Hawaii Preparatory Academy at Waimea | August 2018 - May 2022

Graduated top 10 of class with a GPA of 4.35. Admitted to Cum Laude Society. Awarded "Positive Divergance Award" as well as the "Engineering Award" for academic achievements.

Key Skills

- Python
- C++
- Raspberry Pi
- Linux
- Git
- TI-BasicFluent in Spanish
- Car Mechanics / Wiring
- Docker
- Solidworks
- Arduino / Particle

Projects

- Developed a Python Package that integrates with the school's dining service to be able to easily deploy the menu with third party applications. (Python, API Framework Knowledge).
- Wrote a 1500+ line program to solve advanced Kinematics, Energy/Work, Momentum/Impulse, Force, Projectile Motion, Center of Mass problems. (TI-BASIC).
- Arch Linux package with Python that can efficiently browse the Arch wiki offline, providing vital technical support to the Arch community in times of no connectivity. (Python).
- With Raspberry Pi, I coded a script that can take raw data from accelerometer and a gyroscope to provide real-time motion data for ski-racers. (Python).
- I developed a Physics Engine that simulates the motion of the planets in our solar system with real world data. Later developed it into a game where the player can control the thrust of a rocket to try and get to other planets. (Python).
- Capstone project of High School: I designed and developed a compost sifting machine that could take raw unusable compost and turn it into usable rich soil. (Python & Wiring Skills).
- Developed a walk-in freezer / fridge central control system for Jacob Springs Farm near Boulder Colorado. (C++ & Arduino & Python).
- At home I have my own server that I made which runs different docker containers. I can provide Wi-Fi support from abroad via a self-hosted VPN. Manages DHCP licenses on network and hosts a variety of other services that run in parallel. (Linux & Python).

Interests

- Competant indoor and outdoor climber. Both trad and sport.
- Tennis Advanced to State Championships (2022).
- Advanced SCUBA Certified / Freediving Certified.
- Sailing Multiple Advanced Licenses.