

# KYLE BROWN

Los Angeles, CA | (916) 768-6354 | kylebrown978@g.ucla.edu

Aspiring Hardware Engineer with an educational background in aerospace engineering. Recognized for natural ability to collaborate with peers and co-workers to achieve common goals. Work history that showcases flexibility, adaptability, ability to exceed expectations in fast-paced environments.

## EDUCATION

---

University of California, Los Angeles |UCLA

2024

- GPA: 3.0, Aerospace Engineering, B.S.

Cañada College

2019-2022

- GPA: 3.98, Aerospace Engineering

## ENGINEERING SKILLS

---

**Computer:** Experienced using C++, Solidworks, Octave/MATLAB, and Microsoft Office

**Coursework:** Statics, Dynamics, Calculus, Propulsion, Fluid Mechanics, Differential Equations, Thermodynamics

## Projects

---

Autonomous Drone |UCLA

2024

- Collaborated in a team to design and build an autonomous drone, emphasizing control systems and sensor integration.
- Integrated the Adafruit MPU 9250 IMU for precision orientation tracking and the Livox MID-360 LiDAR for navigation and obstacle detection.
- Implemented communication between sensors, Jetson Orin flight computer, and control systems, optimizing autonomous pathfinding and stability.
- Conducted simulations and testing to ensure accurate flight control and obstacle avoidance.

Spacecraft Design | UCLA

2024

- Managed instrumentation for a comment sample return mission, integrating payloads like NIRS3 Spectrometer, TIR Camera, LiDAR and SUDA.
- Led the development of the sample collection system using the Hayabusa Sampler Horn and xLink robotic arm for transfer to the OSIRIS-REx SRC.
- Contributed to system engineering propulsion, power, and trajectory analysis, utilizing the NEXT 9a ion thruster and ROSA solar array to meet mission goals.

## WORK EXPERIENCE

---

Server/Bartender

2022-2024

R&D Kitchen, Los Angeles, CA

- Worked diligently to ensure the satisfaction of customers with their dining experience
- Memorized and prepared cocktails in a fast paced, pressured environment

Engineering Intern

2021

Cañada College, Redwood City, CA

- Met with Engineering Companies including NASA and ESAero
- Gained knowledge of industry standards and hardware engineering practices related to component technology