

KYLE BROWN

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Aspiring 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, 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 Llivox 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

Aerospace Systems Engineering Intern

2022-2024

Independent Engineering Project - Los Angeles, CA

- Supported system-level aerospace design activities including requirements definition, trade studies, and subsystem integration
- Performed analytical, studies using Matlab and Solidworks to evaluate system performance, design margins, and interface layouts
- Contributed to technical documentation and basic verification planning using standard aerospace system engineering practices

Engineering Intern

2021

Cañada College, Redwood City, CA

- Met with Engineering Companies including NASA and ESAero
- Learned about industry standards and hardware engineering practices related to component technology