Chris McCormick

(949) 444-9470
chrismccormick@g.ucla.edu

Los Angeles, CA

LinkedIn
chrismccormick45.github.io

UCLA M.S. Aerospace Engineering student with research experience in applying uncertainty quantification (UQ) to analyze and process flight data for D90, a tailless UAS. Also have hands-on experience in designing and building quadcopters and RC airplanes.

EDUCATION

University of California, Los Angeles (UCLA)

Bachelor of Science − Aerospace Engineering	*GPA: 3.98/4.00, Summa Cum Laude*	*Graduated:* **Fall 2024**
Master of Science − Aerospace Engineering	*GPA: 3.90/4.00*	*Expected Graduation:* **Winter 2026**

PROJECTS & EXPERIENCE

UCLA Taira Lab Undergraduate & Graduate Student Researcher   **June 2023 — Current**
• Working with Prof. David Williams at Illinois Institute of Technology to construct tailless flight dynamic equations for D90.
• Using uncertainty quantification optimization methods to analyze flight data and construct accurate aerodynamic models.
• Applying Markov Chain Monte Carlo (MCMC) methods to add robustness to the UQ optimization approach.
• Using Morris Screening global sensitivity analysis to find significant parameters within each proposed model.
• Utilizing MATLAB and Simulink to process flight data and model the control systems onboard D90.
• Processed CFD data and constructed 3D printable files of different airflows over straight and swept wings.

UCLA Engineering Plane Design   **Jan. 2023 — Mar. 2023**
• Lead a team of students in designing, testing, and assembling a remote-controlled airplane.
• Learned and improved communication and organizational skills, allowing my team to overcome a multitude of challenges.
• Modeled the entire airplane in SolidWorks, 3D printed different parts, and learned how to operate a foam cutter.
• Placed in class competitions and won the award for the fastest airplane.

Personal RC Drone Project   **June 2023 — Sept. 2023**
• Conducted copious amounts of research prior to selecting each component of the drone.
• 3D modeled drone frame in SolidWorks, and 3D printed with personal 3D printer.
• Learned how to solder and configure and optimize the drone for different flying styles.
• Studying to take HAM Amateur Radio License exam so I can attach a VTX chip and camera to the drone.

Design/Build/Fly at UCLA (DBF)   **Sept. 2022 — June 2022**
• Contributed to the design and assembly of a remote-controlled airplane placed in an intercollegiate AIAA competition.
• Learned how to run and analyze CFD simulations on different airfoil and wing designs using COMSOL.
• Manufactured and tested the vertical and horizontal stabilizers on the airplane.
• Placed 15th against 81 competing universities in the most recent competition, the highest ever ranking UCLA history.

UCLA Engineering Rocket Design   **Sept. 2022 — Dec. 2022**
• Formed a team of students to design, assemble, test, and launch two model rockets.
• Conducted research on rocket design and communicated my understanding to my teammates.
• Learned how to operate a laser cutter and improved my 3D modeling and 3D printing skills.
• Placed in class competitions and won the award for the highest apogee, with our second rocket achieving ~3200 ft.

Personal Coding Projects   **Jan. 2022 — Current**
• Developed my personal website from the ground up using HTML, CSS, and JavaScript.
• Written multiple programs in C++ to calculate expenses, calculate income, play games, and more.
• Asked to and became a C++ class tutor for a previous professor of mine.
• Learned how to program an Arduino Uno and use it to conduct different light displays.

Saddleback College Mars Rover Team   **Jan. 2022 — June 2022**
• Joined the Chassis and Electrical teams and helped assemble a remote-controlled rover.
• Designed and 3D modeled inner components and electrical housing boxes within the rover's chassis.
• Helped in the repeated testing of the rover prior to competition.
• Entered an international, intercollegiate University Rover Competition.

EXTRACURRICULARS AND AWARDS

SoCal Fluids Research Conference Presenter – *Presenting my research at the SoCal Fluids research conference.*   **April 2025**
Taira Lab Outreach Events – *3D printed various mechanisms to teach high school students fluid mechanics*   **Nov. 2023 — Current**
Tau Sigma Academic Honor Society – *Member of UCLA honor society*   **May 2023 — Current**
Phi Theta Kappa Academic Honor Society – *Member of academic honor society*   **April. 2020 — Current**
Saddleback College Tutor – *Computer Science Class Tutor (C++), Physics, Chemistry, and Math Tutor*   **Aug. 2019 — May 2022**