# **Chris McCormick**

(949) 444-9470 <a href="mailto:chrismccormick@g.ucla.edu">chrismccormick@g.ucla.edu</a>

Los Angeles, CA

<u>LinkedIn</u> chrismccormick45.github.io

UCLA B.S. & M.S. Aerospace Engineering student with experience designing, testing, building, and conducting undergraduate research on drones, quadcopters, and remote-controlled airplanes. Currently looking to apply my design and research experience to large-scale projects.

#### **EDUCATION**

#### University of California, Los Angeles (UCLA)

**Bachelor of Science** – **Aerospace Engineering** GPA: 4.00/4.00 **Master of Science** – **Aerospace Engineering** GPA: --/4.00 Expected Graduation: Fall 2025
Expected Graduation: Fall 2025

# **PROJECTS & EXPERIENCE**

# UCLA Taira Lab Tailless UAS Undergraduate Research Assistant

June 2023 — Current

- Working in conjunction with the Illinois Institute of Technology to reconstruct aircraft control equations for a tailless UAS.
- · Utilizing MATLAB and Simulink to process flight data and model the systems within the UAS.
- Reconstructing nonlinear flight stability and control equations for the drone using spares identification methods.
- · Learning and improving data processing, communication, and organizational skills.

# **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 improved my foam cutter operating skills.
- Placed in class a competition and won the award for the fastest airplane.

# **Personal RC Drone Project**

<u>June 2023 — Sept. 2023</u>

- Conducted copious amounts of research prior to designing and 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 of the airplane.
- Placed 15<sup>th</sup> against 81 competing universities in the most recent competition, the highest ever ranking in 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 (second rocket achieved ~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 become a C++ class tutor for a previous professor of mine.
- Learned how to program an Arduino Uno and used 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

UCLA Aerospace Engineering Departmental Scholar – Completing B.S. & M.S. simultaneously	Nov. 2023 — Current
Taira Lab Outreach Events – 3D printed different shapes to show high school students fluid flow	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