Euan Houston

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SKILLS

Aircraft Design: Performance lead for A-30 Condor at Cal Poly, 35 week design process

Research - Developed non-invasive muscle sensors for use on birds to analyze efficient flight mechanics to implement into aviation technology - Dr. Hiremath, AIAA Conference, 2023

CFD analysis w/ Ansys: Cylinder vortex shedding, Propellant sloshing in a cup, Lift over an airfoil

CAD Design/Manufacturing: Modeled & manufactured air motor (Solidworks, CNC, Lathe, etc.)

Data Analysis: Highly proficient in Matlab and Python for Data Analysis. Directly used to analyze muscle sensor data, aerodynamics of aero team designed aircraft, and prototype software results

Coding: CS Internship - 13 wks, Experience in Matlab, Python, Java, Structured Text, & Arduino

Leadership: Triathlon Club Treasurer ($50,000 budget), Cross Country (XC) Captain (100+ athletes)

EDUCATION

California Polytechnic State University, San Luis Obispo
- *BS Aerospace Engineering*, [*Core subjects:* **Computational Fluid Dynamics, Fluid Mechanics**, High & **Low speed Aerodynamics**, Thermodyn., **Aircraft Performance & Design**, Systems Eng, Mfg Eng, **Propulsion**, Dynamics/ Controls ; associated hands-on **lab work**]
- *Course project:* Fully **designed & built** ESTES C6-3 based **rocket** able to launch and protect a payload on landing; successfully launched & deployed achieving third Place in Aero Program
- *Minor: Computer Science,* [*Core subjects:* Data Structures, Object-Oriented Programming]
- *Athletic Scholarship* for XC/Track & Field (TF)   Cumulative GPA - **3.7**

EXPERIENCE

Yaskawa America Inc. Robotics and Motion Control - **Mechatronics Internship**:
Led **idea generation** and problem-solving efforts in testing the iCube Controller, identifying innovative solutions to software-hardware integration challenges. Completed 26 Test Cases, 75,000+ lines of code in 13 weeks.

Aircraft Design - **Performance Lead**: Collaborated in an Aero team of 7 Aeronautical Engineers to fully design Light Tactical Aircraft capable of counter-insurgency and close air support. Ensured aircraft capabilities, (TO, LD, Vn, FE, Thrust), and presented to GA, NG, Air Force.

AWARDS / PASSIONS

Undergraduate researcher with Dr. Hiremath (Cal Poly);   **Treasurer** of triathlon club;
Scholarship Athlete to Division 1 University (Cal Poly);   **Sys. Eng**: designed rocket-propelled glider project using Arduino and servos for control

Captain of high school XC and TF teams while maintaining a 3.9 unweighted GPA
Completed **physical service projects** and helped improve the lives of adults with developmental disabilities at Rainbow Acres (Youth Mission, multiple years)