Sean Wu

Master's in Aerospace Engineering with experience in aerodynamics, aircraft conceptual design, and optimization.

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EDUCATION

M.S. in Mechanical and Aerospace Engineering University of California, Davis Dec 2017
Topic: Wind Tunnel Wake-Based Drag Measurements
Awards: Dean's Graduate Support Fellowship (2014),
Certificate in Scholarly Teaching Strategies (2017)

B.S. in Aerospace Engineering University of Miami, FL May 2014
Capstone Project: Electric Light Sport Airplane
Exchange Student*:* University of Cantabria, Spain (2012*)*

EXPERIENCE

Guest Lecturer, University of California, Davis **02/2018**
Aircraft Performance and Design

- Took students through the conceptual design of a sample aircraft in one interactive class period
- Drafted a 3D aircraft model in real time using OpenVSP
- Demonstrated preliminary aircraft aerodynamic analyses

Graduate Student Researcher, University of California, Davis **10/2014-12/2017**

- Developed an experimental test proposal for an airfoil with flow control under contract for Boeing
- Reduced uncertainty in the UCD wind tunnel wake-measured drag by one order of magnitude
- Created wind tunnel safety and training protocols in collaboration with university safety staff
- Mentored 6 undergraduates on experimental testing and CFD simulation of airfoils
- Led a 7-person weather balloon research team in the Mojave Desert

Grader, University of California, Davis **06/2017-08/2017**
From the Wright Brothers to Drones and Quadcopters

Teaching Assistant, University of California, Davis **09/2015-06/2016**
Aircraft Performance and Design; Fluid Mechanics

- Advised 11 student teams in the conceptual design of aerobatic and distributed-electric aircraft for AIAA and NASA competitions
- Researched advanced air vehicle concepts including boundary-layer ingestion and blown-flaps
- Demonstrated use of aerodynamic tools and empirical methods for aircraft performance analysis
- Documented student outcome assessments for departmental ABET accreditation

Intern, NASA Glenn Research Center, Cleveland, OH **06/2015-08/2015**

- Developed a helicopter performance prediction model in Python for flight trajectory optimization
- Gained experience with professional software engineering practices

SKILLS

Computational	OVERFLOW/ Chimera Grid Tools (CFD), XFOIL, XFLR5, Vortex-Lattice Codes, OpenVSP
Programming	MATLAB/ Simulink, LabVIEW, Linux (Bash), Git
Productivity	MS Office (Word, Excel, PowerPoint), LaTeX

ACTIVITIES

- **Private Pilot**: Single-Engine Airplane (2008), Glider (2016)
- **Remote Pilot**: Small Unmanned Aircraft Systems (2017)
- **Experimental Aircraft Homebuilding** (Van's RV-12)
- **Equipment Manager**, UC Davis Sailing Team **(2016-2017)**