

Sean Wu

Master's in Aerospace Engineering with experience in Aerodynamics, Aircraft Conceptual Design, and Optimization

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Aerodynamics
Wing Tunnel Testing
Team Leadership

Aircraft Conceptual Design
Conceptual Fluid Dynamics (CFD)
Technical Presentation

MS, Mechanical and Aerospace Engineering, University of California, Davis (Dec 2017)
BS, Aerospace Engineering, University of Miami, FL (May 2014)

Computational	OVERFLOW (CFD), XFOIL, OpenVSP
Programming	LabVIEW, MATLAB/ Simulink, Python, Linux (Bash), Git
Productivity	MS Office (Excel, Word, PowerPoint), LaTeX

WORK HISTORY

Graduate Student Researcher, University of California, Davis

10/2014-12/2017

- Developed an experimental test proposal for an airfoil with active 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 2 university safety officers
- Mentored 6 undergraduates in experimental testing and computational fluid dynamics analysis of airfoils
- Led a 7-person weather balloon research team in the Mojave Desert

Teaching Assistant, University of California, Davis

09/2015-06/2016

- Advised 66 students divided into 11 teams in the conceptual design of aerobatic and distributed-electric aircraft for AIAA and NASA competitions
- Researched advanced engineering solutions such as boundary-layer ingestion and blown-flaps
- Demonstrated use of aerodynamic design tools for aircraft performance analysis

Intern, NASA Glenn Research Center, Cleveland, OH

06/2015-08/2015

- Contributed to the development of a flight trajectory optimization code in OpenMDAO
- Gained experience with professional software engineering practices

ADDITIONAL EXPERIENCE

Guest Lecturer, University of California, Davis

02/2018

- 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 analysis

Equipment Manager, UC Davis Sailing Team

05/2016-09/2017

Private Pilot: Airplane Single-Engine Land; Glider

Remote Pilot: Small Unmanned Aircraft Systems

Experimental Aircraft Homebuilding, Van's RV-12