Sean Wu

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

seanwu@ucdavis.edu
https://linkedin.com/in/seanmwu

Aerodynamics	**Aircraft Conceptual Design**
Wind Tunnel Testing	**Conceptual Fluid Dynamics (CFD)**
Team Leadership	**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