

Logan Halstrom

Department of Mechanical and Aerospace Engineering, One Shields Avenue, Davis, CA 95616
ldhalstrom@ucdavis.edu • (530) 965-0755 • <https://github.com/ldhalstrom>

EDUCATION

University of California, Davis, California USA

- Ph.D. Student in Aerospace Engineering Sep 2013 – Mar 2018
 - Thesis: Dynamic Mesh Applications and Validation for Computational Fluid Dynamics Simulations of Parachutes
 - Adviser: Prof. Stephen Robinson
 - Focus: Computational Fluid Dynamics, dynamics.
- Bachelor of Science (B.S.) in Aerospace Engineering and Mechanical Engineering Jun 2013
 - Graduated with College Honors.

EXPERIENCE

Johnson Space Center, National Aeronautics and Space Administration

- Pathways Intern, Applied Aeroscience and CFD Branch (EG3) Jun 2014 – Present
Projects:
 - Dynamic simulations of Orion parachute oscillations
 - Optimization of Orion Flush Air Data System sensor array
 - Transonic stability analysis of RED-Data2 re-entry heating probeSupervisors: Steve Labbe and Ben Kirk
- USRA Intern, Aircraft Operations Division (CC3) Jul 2013 – Sep 2013
Projects:
 - Designed and conducted pitot-static calibration for WB-57 aircraft
 - Assisted in Reduced Gravity Operations safety inspectionsSupervisors: Gregory Johnson and Jack Woods

University of California, Davis

- Teaching Assistant, Department of Mechanical and Aerospace Engineering Sep 2013 – Present
Courses:
 - *Applied Aerodynamics*: Compressible/transonic, viscous flow, finite wings, aircraft equilibrium, panel methods
 - *Computational Aerodynamics*: 2D finite difference Euler methods, transonic small-disturbance theory
 - *Stability and Control of Aerospace Vehicles*: State-space representation, longitudinal and lateral stability
 - *Rocket Propulsion*: Fluid and thermodynamics of liquid and solid rocket enginesSupervisors: Dr. Stephen Robinson, Dr. Jean-Pierre Delplanque, Dr. Ron Hess, and Dr. Mohamed Hafez

AWARDS & SCHOLARSHIPS

- Outstanding Achievement, NASA Johnson Space Center Office of Education Aug 2015
For outstanding contributions as an intern for the Johnson Space Center
- Service Award, UC Davis Department of Mechanical Engineering May 2013
For service as the captain of the Advanced Modeling Aeronautics Team
- Regents' Scholar, University of California 2011 – 2013
The most prestigious award on the UC Davis campus given to students entering with a GPA higher than 3.80
- Forrest Mitchell Award, Northern California Scholarship Federation 2012
For maintaining the highest GPA of any Junior scholarship recipient
- Engineering Dean's List, University of California, Davis 2011
For achieving a GPA in the top 16 percent of the College of Engineering
- Outstanding Achievement in Physics, Butte Community College 2011
For exceptional performance in the field of physics
- Presidential Scholar, Humboldt State University 2010
For achieving a GPA in the top 15th percentile
- Bill Kent Award, Northern California Scholarship Federation 2009
For maintaining the highest GPA of any Freshmen scholarship recipient

PROFESSIONAL AFFILIATIONS & ACTIVITIES

American Institute of Aeronautics and Astronautics, UC Davis Chapter, Davis, California

- Member 2011 – 2014

**CAMPUS
ACTIVITIES**

Advanced Modeling Aeronautics Team, UC Davis

Sep 2011 – Jun 2013

- Captain
 - Competed in the Society of Automotive Engineers (SAE) 2013 Aero Design West Competition
 - Placed 2nd internationally in overall competition
 - Designed and manufactured a model aircraft optimized for specific mission requirements
 - Managed team members throughout all stages of the design process

SKILLS

Documentation/Presentation

- L^AT_EX, Beamer, Microsoft Word, Power Point

Computing

- Linux, Python, MATLAB, FORTRAN, C++, High Performance Computing, MPI/OpenMP

Computational Fluid Dynamics

- OVERFLOW, OpenFOAM, Chimera Grid Tools, Pointwise, Tecplot 360/ParaView

LANGUAGES

- English: Native language
- Spanish: Basic (speaking, reading, writing)
- Russian: Basic (speaking, reading, writing)

INTERESTS

Backpacking, digital photography, running, cooking

[CV created on 10-31-2016]