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 probe
  Supervisors: 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 safty inspections
  Supervisors: 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 engines
  Supervisors: 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

- Captain — Sep 2011 – Jun 2013
  - 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

- LaTeX, 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

[*CV created on 05-11-2016*]