

# Samuel Morice

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## Education

- **University of California, Davis** **Davis, CA**  
2016 – Current  
*M.S. Mechanical and Aerospace Engineering*
    - Viscous Flow Control for Stall Management
  - **University of California, Davis** **Davis, CA**  
2012-2016  
*B.S. Mechanical and Aerospace Engineering*
    - College of Engineering Dean's List: Fall 2012, Winter 2013, Fall 2015
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## Experience

- **UC Davis Center for Human/Robotics/Vehicle Integration and Performance** **Davis, CA**  
2016 – Current  
*Graduate Student Researcher*
    - Researching boundary layer separation control using autonomous vortex generators
    - Leading a team of undergraduate engineering students to perform wind tunnel tests in the UC Davis subsonic Aeronautical Wind Tunnel
    - Writing and preparing wind tunnel test plans and procedures
    - Manufacturing and instrumenting a wing model to use in the wind tunnel
    - Designing and building a mechatronic system to activate vortex generators on the test section
    - Working with micro controllers to collect and process data from microphones
    - Writing Python scripts to analyze experimental data
    - Upgrading the current wind tunnel to meet the needs of my experiments
    - Writing a thesis that details the experiments done and the results obtained from the experiments
  - **IMPROVE Air Quality Network at UC Davis** **Davis, CA**  
2015-2016  
*Student Field Technician*
    - Repaired vacuum pumps, electronic circuits, and air sampling equipment in a workshop setting
    - Tested repaired equipment to ensure quality before sending the equipment to the remote sampling sites
    - Traveled around the country to remote air quality sampling sites
    - Performed routine maintenance on the air sampling equipment while at the sampling site
  - **Hunter Industries** **San Marcos, CA**  
Summer 2014  
*Engineering Intern*
    - Assisted the senior engineers by working on pending projects
    - Implemented design changes that improved the irrigation controller product
    - Designed and performed tests and trade studies that led to a product redesign which went into production
    - Gained 3D CAD and plastic injection molded part design skills using PTC Creo Parametric
  - **Hunter Industries** **San Marcos, CA**  
Summer 2013  
*Machine Shop Intern*
    - Assisted the machinists by completing tasks around the machine shop
    - Operated manual Bridgeport mills, manual lathes, and Hass CNC lathes.
    - Learned 3D modeling using PTC Creo Parametric and SolidWorks
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## Core Technical Skills

**Programming Languages:** Python, MATLAB,  $\LaTeX$ , C, HTML5, CSS3

**Fabrication:** Manual and CNC mill and lathe, soldering, 3D printing