

# Jessica Chambers

10600 Bloomfield Dr. Apt 1022, Orlando, FL 32825  
305-338-3486 • Jessica.chambers7@hotmail.com

## EDUCATION

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University of Central Florida, Orlando, FL  
Bachelor of Science in Mechanical Engineering  
GPA: 3.7/4.0

Expected Graduation Date: Spring 2015

## RELEVANT COURSEWORK

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- Thermodynamics
- Heat Transfer
- Turbines
- Energy Systems Lab
- Numerical Methods
- Fluid Mechanics 2
- Measurements
- Propulsion Systems

## SKILLS

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SolidWorks, Mathcad, MATLAB, Powerplot, LabVIEW, C++, Microsoft Suite, Fluent in Spanish

## EXPERIENCE

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**Research Apprentice** UCF, Orlando, FL January 2015 -Present  
*Propulsion and Energy Research Laboratory*

- Schlieren and PIV data processing with MATLAB for Pulse Detonation Engine research

**Siemens Internship** Orlando, FL May 2014 – Present  
*Combustion Engineering Group*

- Help conduct Root Cause Investigation for a Pilot Nozzle validation issues
- Automate thermocouple and engine data analysis using MatLAB and Powerplot
- Extract and process daily engine testing data using Excel to render plots
- Create and manage folder structure for combustion system variants in Team Center database

**Research Apprentice** UCF, Orlando, FL January 2014- August 2014  
*Center for Advanced Turbines and Energy Research*

- Assembled the test rig and wind tunnel for Impingement Cooling of Gas Turbines experiment
- Troubleshooting the execution of the design, aiming to improve efficiency of test results

## LEADERSHIP

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**National Society of Black Engineers**, UCF Orlando, FL June 2013 – May 2014  
*Pre-College Initiative Chair*

- Planned and coordinated community involvement events for over 100 members to participate
- Led events that educated and inspired grade school students to pursue a technical degree in STEM
- Designed and facilitated interactive STEM related projects/activities for K-12th grade students

## UCF TECHNICAL PROJECTS

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**AIAA Rocket Competition** August 2014 - Present

- Collaborated in a team of 2 members to build a Strong Arm model rocket
- Calculated in flight properties to predict rocket launch trajectory using Mathcad
- Conducted Computational Fluid Dynamics analysis of model using SolidWorks Flow Simulation

**NSBE Solar Panel** September 2013

- Worked in a team to construct a frame out of Plexiglas and wood using sanding tools and nail guns
- Solder and wire solar cells with tabbing and bus wire

## HONORS/AWARDS

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Duke Energy Scholar August 2014  
National Society of Black Engineers Board of Corporate Affiliates Scholar March 2014  
Lockheed Martin Scholar March 2014  
UCF Dean's List January 2012 - Present