

Christian Engelmann

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Education

- University of Central Florida - Orlando, Florida GPA: N/A
- Masters of Science in Thermofluid Aerodynamic Systems Design and Engineering May 2018
 - Bachelors of Science in Aerospace Engineering ♦ GPA: 3.1 August 2012 - May 2016

Engineering Experience

- UCF Senior Design Project: Pulsed Plasma Thruster - Team Lead August 2015 - May 2016
- Coordinated a yearlong project involved with designing, improving, and manufacturing a Pulsed Plasma Thruster
 - Familiarized myself with hands-on engineering work as well as in-depth involvement with companies through technical advisors and sponsorships
- UCF Small Satellite Payload and Integration: CubeSat Project - Power Subsystem ♦ August - December 2015
- Participated in a 100-person class with the objective to design a 1U CubeSat along with a mission
 - Demonstrated the importance of communication within individual subsystems and between cooperative subsystems, with myself as the AD&C liaison
- UCF Introduction to Engineering Projects - Design Lead August 2012 - May 2013
- Constructed two vehicles with the task of transporting an object, one on land and the other across water
 - Developed teamwork, ingenuity, and creativity to help accomplish a goal with minimal budget

Technical Skills

Engineering: NX Nastran 8.5, Autodesk Inventor, Mathcad 15, LabVIEW, C, MATLAB, Autodesk AutoCAD

Microsoft Office Certifications: Word, Excel, PowerPoint, Access

Classes: M.S. (IP) - Mathematical Methods, Intermediate Fluid Mechanics, Intermediate Aerodynamics

B.S. - Heat Transfer, Vibrations, Feedback Controls, Thermodynamics, Dynamics, Leadership in Engineering, High Speed Aerodynamics, Flight Mechanics, Aerospace Structures, Propulsion Systems, Space Systems, Analysis and Computation, Aerodynamics, Solids Mechanics

Work Experience

- UCF MAE Department - Teaching Assistant August 2016 - Present
- Taught and mentored 3 lab sections of 40 new college engineering students with AutoCAD, MATLAB, and mBots
- Personal Math Tutor August 2011 - May 2012
- Coordinated tutoring of local elementary school students to greatly improve their grades in mathematics
- Sheldegren Pet Resort and Salon - Pet Care Technician August 2008 - May 2012
- Oversaw care of cats and dogs through cleaning, feeding, and watching them at a local family small business

Leadership and Involvement

- Pi Kappa Phi Fraternity - UCF Founding Father September 2013 - Present
- Participated in and organized multiple events that supported Pi Kappa Phi's owned and operated philanthropy The Ability Experience
- UCF Rock Climbing Club - Member August 2015 - May 2016
- American Institute of Aeronautics and Astronautics - Member August 2015 - May 2016

Research

PERL (Propulsion and Energy Research Laboratory) - Dr. Kareem Ahmed

August 2016 - Mary 2018

- Investigated the phenomena of flame extinction of a pre-mixed airflow around a bluff-body flame holder in the combustion chamber of a Ramjet
- Experimentally replicated previously mathematically modeled flame characteristics utilizing Particle Image Velocimetry (PIV)

Publications

In Progress:

- TurboExpo Conference 2017 (2nd Author) - "Extinction characteristics of a ballistic bluff-body flame holder"
- TurboExpo Journal 2017 (2nd Author) - "Extinction characteristics of a ballistic bluff-body flame holder"

Planned:

- Propulsion and Energy 2017 (1st Author)
- SciTech 2018 (1st Author)
- Journal #1 (1st Author) - Spring 2017
- Journal #2 (1st Author) - Fall 2017
- SciTech 2018 (2nd Author)