

PROFESSIONAL PREPARATION

- ★ Doctor of Philosophy, Mechanical Engineering 2015 – Current
Engineering and Applied Sciences
Advisor: Dr. Alessandro Gomez
Yale University; New Haven, CT.
- ★ Master of Science, Aerospace Engineering 2014 – 2015
- ★ Bachelor of Science, Aerospace Engineering 2009 – 2014
Joint B.S./M.S. Program, *Cum Laude* Honors, & Honors in the Major
Advisor: Dr. Shawn A. Putnam
University of Central Florida; Orlando, FL.

APPOINTMENTS

Graduate Research Assistant (Yale University): July 2015 – Current
Investigating soot formation in diffusion and partially premixed counterflow flames at elevated pressures up to 5MPa, incorporating a wide range of diagnostics to study both gas phase kinetics and soot inception/growth.

Graduate Research Assistant (University of Central Florida): May 2014 – May 2015

- 1) Collaboration with NASA Kennedy Space Center Launch Services to experimentally measure the rate of vapor migration into a payload fairing on a launch vehicle.
- 2) Developing a low temperature, vapor-phase deposition technique of modified graphene oxide using a coupled evaporation-to-condensation transfer process.
- 3) Studying steady-state water droplet evaporation on a heated substrate systematically correlate the effects of a droplets contact angle on the evaporation rate.

Undergraduate Research Assistant: Nov. 2012 – May 2014
Investigating water microdroplet evaporation on heated substrates, focusing on both controlling a droplets contact line dynamics and validating numerical models.

Teaching Assistant/Tutor:

- ⇒ Mechanical Engineering II: Fluid Mechanics Aug. 2016 – Dec. 2016
- ⇒ Fundamentals of Aerodynamics Jan. 2015 – May 2015
- ⇒ Fundamentals of Aerospace Flight Aug. 2013 – Dec. 2013
- ⇒ Aerospace Vibration Analysis Jan. 2013 – May 2013
- ⇒ Aeroelasticity Jan. 2013 – May 2013
- ⇒ Engineering Thermodynamics Aug. 2011 – Dec. 2012
- ⇒ Engineering Analysis: Dynamics May 2012 – Aug. 2012

HONORS & AWARDS

- Best Presentation at UCF MAE Department Graduate Research Symposium 2015
- Best in Category (Engineering, CS, & Optics) at UCF Graduate Research Forum 2015
- Department Nominee for UCF College of Engineering 2014 Founders' Award 2014
- Office of Undergraduate Research Student Research Grant 2013
- Honors in the Major Scholarship 2013