
EDUCATION	University of California, San Diego <i>Ph.D. in Mechanical Engineering</i> - Advisor: Carlos F.M. Coimbra	2012–present
	University of California, Merced <i>B.S. in Mechanical Engineering</i> - Dean's Undergraduate Research Scholarship (2008–2009) - Dean's Honor List (Fall 2008, Fall 2011)	2008–2012
CITIZENSHIP	U.S.	
RESEARCH EXPERIENCE	Lab Manager, Coimbra Group <i>University of California, San Diego</i> - Automated detection of remote instrument failures - Implemented centralized version control for all projects - Deployed irradiance and weather sensor systems at UCSD and Folsom, CA - Manage group information infrastructure (computers, servers, databases) - Oversee research lab safety (15+ personnel)	2012–present
	Graduate Student Researcher, Coimbra Group <i>University of California, San Diego</i> - Developing forecasting methods for chaotic time series	2012–present
	Visiting UC LEADS Scholar, Animal Flight Lab <i>University of California, Berkeley</i> - Host Program: Cal NERDS - Investigated effects of turbulent flow on hummingbird kinematics and metabolism - Developed Particle Image Velocimetry (PIV) data analysis scripts for turbulent flow	Summer 2011
	UC LEADS Scholar, Coimbra Group <i>University of California, Merced</i> - Investigated aerodynamic trends of flapping flight	Summer 2010
	Lab Manager, Coimbra Group <i>University of California, Merced</i> - Deployed irradiance and weather sensor systems in CA (Merced, Berkeley, Davis) and WA (Bellingham) - Manage group information infrastructure (computers, servers, databases) - Oversaw research lab safety (10+ personnel)	2010–2012
	Undergraduate Student Researcher, Coimbra Group <i>University of California, Merced</i> - Tested long term degradation of anti-dust glass coating for solar panels - Analyzed animal flight data to determine underlying aerodynamic trends	2009–2012
	Undergraduate Student Researcher, Hirst Group <i>University of California, Merced</i> - Investigated phase separation in lipid tubules	2008–2009

2007–2008

University of California, Santa Cruz

- Developed prototype printable RF-ID tag for tracking of dragonflies

TECHNICAL SKILLSETS

Software

- Languages: Python, Matlab, Mathematica, UNIX Shell
- Version Control: Git
- TeX: LaTeX, Bibtex
- CAD: Pro/ENGINEER, Autodesk Inventor

Rapid Prototyping

- Machining: mill, lathe, and drill press machining
- 3D printing

Instrumentation

- Irradiance and weather sensors
- PIV: high speed cameras, q-switched lasers, wind tunnels

Operating Systems

- OS X, Linux, Windows

AWARDS

Innovate to Grow Competition

May 2012

- 1st Place (tied) People's Choice
- Entry Title: Harvesting Energy from Irrigation Canals
- Authors: D.P. Larson, D. Leong, S. Fleming, S. Isaiah

Distributed Power Generation Project

2011

- Sponsors: ESW, SunEdison/MEMC, Autodesk
- Entry Title: Solar Powered Cargo Ship
- Funding Amount: \$8150

CITRIS Big Idea Competition

Apr 2010

- Honorable Mention
- Entry Title: Distributed Computing for Open Access Solar Forecasting
- Authors: R. Marquez, D.P. Larson, H.T.C. Pedro
- Award Amount: \$1000

ASME Old Guard Oral Presentation Competition

Apr 2010

- 5th Place, District D
- Entry Title: Distributed Computing for Open Access Solar Forecasting

PROFESSIONAL MEMBERSHIPS

American Society of Mechanical Engineers

Student Member

2009–present

Engineers for a Sustainable World

Student Member

2011–present