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# **Objective:**

Internship at Industry or Research labs, Fellowships

## Education:

**Ph.D.**, Mechanical Engineering, University of Central Florida, *Expected graduation: Spring 2014* Concentration: Fluid mechanics, Heat Transfer, Thermodynamics Current Research area: Solid Oxide Fuel Cell Simulation

**M.S.**, Mechanical Engineering, University of Central Florida, *Expected graduation: Spring 2012* Concentration: Fluid mechanics, Heat Transfer, Thermodynamics Thesis: Electrolyte-supported Solid Oxide Fuel Cell Simulation

B. E., Mechanical Engineering, Sapthagiri College of Engineering, Bangalore, India, 2006

## **Research Experience:**

- Developed a working model of a Solid Oxide Fuel Cell using COMSOL Mutiphysics<sup>®</sup> 4.2a
- Simulation of Electrolyte-supported Solid Oxide Fuel Cell for multi-layered electrolyte
- CFD analysis of aerodynamic problems using commercial CFD codes

# **Teaching Experience:**

#### University of Central Florida

Graduate Teaching Assistant, Fall 2010 Course: Fundamentals of Aerospace Flight

Graduate Teaching Assistant, Spring 2011 Course: Design of Experiments for Aerospace and Mechanical Engineering

Graduate Teaching Assistant, Summer 2011 Course: Mechanical Engineering Measurements for Aerospace and Mechanical Engineering

Graduate Teaching Assistant, Fall 2011 Course: Mechanical Engineering Measurements for Aerospace and Mechanical Engineering

Graduate Teaching Assistant, Spring 2012 Course: Design of Experiments for Aerospace and Mechanical Engineering

## **Professional Experience:**

Information Technology, Embry Riddle Aeronautical University, Daytona Beach, FL **Student Tech – Desktop Support**, January 2008 – May 2010 Troubleshooting and Upgrades of software & hardware for computers on campus.

Information Technology, Embry Riddle Aeronautical University, Daytona Beach, FL **E-mail Upgrade Assistant**, September – December 2007

Assist in upgrading to a new email system for Staff & Faculty.

**Undergraduate Final Project** – Detection and Rectification of manufacturing defect in Spark Plug threads: Project done at MICO BOSCH, Bangalore, India, 2006.

Member of 3-person team. Carried out detailed analysis of processes that the Spark Plug threads undergo. Retrieved statistical data using the method of Sampling. Used a number of thread measuring instruments to achieve higher accuracy. Performed a series of manipulations to the processes based on statistical observations. Resulted in reduced number of defects.

### Service & other relevant experience:

**Co-founded & Established 'The Center 4 Sustainability' at Embry-Riddle**: A University sub-committee focused on energy-saving, recycling, implementing use of alternate sources of energy, spreading awareness. Relevant projects – 'Power it down', Environmental movie night, 'Trash it Right', Solar Power demonstration on campus, 2009.

**100-Hour Certificate Course in Astronomy and Astrophysics**: Course offered by M.P. Birla Institute of Fundamental Research. Coursework taught my eminent scientists and professors from prestigious institutes in India. Course included Educational trip to Satish Dhawan Space Center (Spaceport of India) and submission a **dissertation on Black Holes**, 2005.

Event-management: For various educational seminars (attendance 70 to 200 people) in India and USA.

## <u>Awards</u>

**Graduate Teaching Assistantship**, University of Central Florida, Fall 2010 – Spring 2012

**Certificate of Excellence for Outstanding Performance** – Information Technology, Embry-Riddle Aeronautical University, 2009

Received an 'Outstanding' grade for Astronomy and Astrophysics Course, 2005

## <u>Skills</u>

*Software*: COMSOL Multiphysics<sup>®</sup>, MATLAB, FLUENT, WIND-US, COBALT, GRIDGEN, AutoCAD, ANSYS, CATIA, Microsoft PowerPoint, Word, Excel, Outlook. *Languages*: FORTRAN, MATLAB, C, PASCAL.