

Lakshmi Reddy Gopi Reddy
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Education:

Doctor of Philosophy in Electrical Engineering, Aug.2008 –present, University of Tennessee, Knoxville. (Expected graduation- Dec.2012) (4.0/4.0)

Masters in Electrical Engineering, August-2007, University of Tennessee, Knoxville, (GPA-3.92/4.0)

Bachelors in Electrical Engineering, 2001-2005, G.R.I.E.T., Hyderabad, India (GPA-3.6/4.0)

Research Experience:

- **Graduate research assistant: (Part-time)** Power Electronics Lab, University of Tennessee, Knoxville, July. 2009 –present
 - Accelerated testing of IGBTs in grid connected FACTS devices funded by DOE through ORNL
 - Lifetime prediction in STATCOM application
 - Methods to enhance lifetime
- **Graduate Research Assistant**, Power Electronics Lab, University of Tennessee, Knoxville, Dec 2005 – Aug 2007
 - Design of highly efficient (95%) electronic ballast for HID lamps for *EPIC Systems, Inc.*, Dallas
 - Understanding schematics and simulation modeling of the design included ***power factor correction, boost converter and resonant inverter***
 - Developed simulation model using PSIM and Simulink
 - Testing of the electronic ballast circuitry with SiC devices
 - Technical Paper titled “Performance of ‘Ultra-High’ Efficient Electronic Ballast for HID lamps using SiC Devices” **Industry Applications Society, IEEE, 2007**

Teaching experience:

1. **Graduate Teaching assistant:** EECS department, UTK, Aug.2009 to Jan- 2010
 - Teach substitution lectures and grade Homeworks and tests
2. **Graduate teaching assistant:** Engineering Fundamentals department, UTK, Aug 2008 to Aug 2009
 - Supervise labs and teach recitation lectures
 - Grade HWs, tests

Fulltime Experience:

1. **Post-Masters Research Associate:** *Power Electronics Laboratory, UTK, Aug.2007 to Aug 2008*
 - Permanent Magnet Synchronous motor drive simulation in MATLAB
 - SiC loss modeling of PMSM motor drive and heat-sink design
2. **Undergraduate Engineering Intern**, Small Industries Services Institute, India, Jan 2005 - Jun-2005
 - Design of automatic railway control system
 - Light sensors and signaling with the help of transmitter and receiver circuits

Awards:

- **Second prize-** (certificate and 200\$ cash) for student poster titled “ Thermal impact of Power factor correction and Harmonic compensation on IGBT of STATCOM Application” IEEE Power System Conference and Exposition (**PSCE-2011**), March 21-24, 2011, Phoenix, Arizona
- **UT Athletic department scholarship,- 5000\$ for one year** Aug-2009 to April-2010
- **Licensed Engineer in Training (EIT)** from state of Virginia since June, 2008
- Paper presentation on “Supervisory control and data acquisition (SCADA) systems” received first prize in Indian Society for Technical Education (**ISTE**) technical meet conducted at CBIT, India
- Paper presentation on “Control of FACT Devices using Artificial Neural Network in EHV transmission” received second prize in Indian Society for Technical Education (**ISTE**) technical meet conducted at GRIET, India

Papers:

- L. GopiReddy, L. Tolbert, B.Ozpineci, Y. Xu, T. Rizey, "Impact of Power Factor Correction and Harmonic Compensation by STATCOM on Converter Temperature and Reliability," Energy Conversion Congress and Exposition, Phoenix, Arizona, Sept.17-22, 2011
- L. GopiReddy, L.Tolbert, H. Zhang, T. Cheek "Performance of 'Ultra-High' Efficient Electronic Ballast for HID lamps using SiC Devices" **Industry Applications Society, IEEE, 2007**

Activities:

- **Reviewer for IEEE Transactions on Power electronics since Dec. 2010**
- Participated in "**The Best Practices in Teaching Programs for Graduate Assistants and Associates, Postdoctoral Lecturers, and New Faculty,**" Workshop organized by Graduate School, University of Tennessee, Knoxville, Fall 2009
- Student member, Institute of Electrical and Electronics Engineers since 2006
- Sub-editor for college magazine *REFLECTIONS*, GRIET, India
- Organized state level technical meet named *PRAGNYA* and cultural meet named *PULSE* for GRIET, India