

# Zacharias George

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## Education:

- Ph.D.** Carnegie Mellon University, Pittsburgh – Electrical and Computer Engineering, 2014 (anticipated)
- M.S.** Carnegie Mellon University, Pittsburgh – Electrical and Computer Engineering, 2010  
GPA: 3.6/4.0
- B.S.** SRM University, India – Electrical and Electronics Engineering, 2009  
GPA: 8.6/10.0
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## Research Experience:

- Graduate Student Researcher**, Carnegie Mellon University, Pittsburgh, 2010 – present  
Research assistant with Dr. David Ricketts and Dr. James Bain, working on designing, modeling and fabricating Atomic Force Microscopes for high frequency AC excitation and measurements
- Student Researcher**, SRM University, Chennai, India, 2008-9  
Designed and created a prototype for fault testing in analog, digital and mixed ICs using a Restricted coulomb energy neural network.
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## Teaching Experience:

- Teaching Assistant**, Carnegie Mellon University, Pittsburgh, 2010, 2011  
18605 – Engineering in Science and Engineering. Graduate level.
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## Projects and Contributions:

- Metal-Insulator-Metal Junctions**, 2011 – Aided in manufacturing MIM junctions
- RF Combiners**, 2011 – Aided with designing the process flow and manufacture of circuit boards for high frequency power combiners
- Spin-torque Oscillators**, 2010, 11 – Performed measurements and studied interactions between point-contact STOs, specifically, angular and field dependencies.
- Silicon nanowires**, 2010 – Designed and fabricated silicon nanowire transistor. Tested them to study their characteristics and compare them with those of conventional transistors.
- Wireless energy transfer for VAD systems**, 2009 – Adapted wireless energy transfer techniques to power Ventricular Assist Devices.
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## Academic Service:

- M.S. Advisory Council**, 2010 – Founding member and Secretary of the M.S. Advisory Council, whose chief function was to provide advisory support to incoming International student at the Master's level.
- The Tartan**, 2009-10 – Weekly columnist for student-run school newspaper on 'How Things Work'.