Prof. Saraju P. Mohanty:

Prof. Saraju Mohanty earned his Ph.D. in Computer Science and Engineering from the University of South Florida in 2003. He obtained a Masters degree in Systems Science and Automation from the Indian Institute of Science, Bangalore, India in 1999, and Bachelors degree (Honors) in Electrical Engineering from Orissa University of Agriculture and Technology, Bhubaneswar, India in 1995. He is currently an Associate Professor at the Department of Computer Science and Engineering, University of North Texas, Denton, TX, USA. He is the director of NanoSystem Design Laboratory (NSDL) at UNT. His research is in "Low-Power High-Performance Nanoelectronics". His research is funded by National Science Foundation (NSF) and Semiconductor Research Corporation (SRC). He is an author of 160+ peer-reviewed journal and conference publications and 2 books. His first book titled "Low Power High Level Synthesis for Nanoscale CMOS Circuits" was published by Springer in June 2008. His publications are well-received by the world-wide peers with a total of 1500+ citations resulting in an H-index of 21 and i10-index of 42 (from Google Scholar). He is an inventor of 2 US patents. He has advised/co-advised 24 dissertations and theses. Six of these advisees have received outstanding students awards at UNT. The students are very-well placed in industry and academia. He has received Honors Day recognition as an inspirational faculty at the UNT for multiple years. He serves on the organizing and program committee of several international conferences. He was a general chair for IEEE-CS Symposium on VLSI (ISVLSI) 2012. He serves on the editorial board of several international journals. He has served as a guest editor for many journals including ACM Journal on Emerging Technologies in Computing Systems (JETC) titled "New Circuit and Architecture Level Solutions for Multidiscipline Systems", in August 2012. He is a senior member of IEEE and ACM.

Talk Title: **DFX for Nanoelectronic Embedded Systems**

Talk Abstract: The consumer electronics such as implantable systems, digital cameras, and multimedia processors are embedded systems. The hardware components of which are at presented realized using a nanoelectronic technology. The nanoelectronic embedded systems have several design challenges of multiple forms including process variation, leakage power dissipation, and security. Design for excellence (DFX) is an approach for handling one or more than one of these nanoelectronic embedded system design challenges. DFX being adopted to addresses these issues such that high-yield, low-cost consumer electronic is made possible and reach wider people of the society. This talk will addressed the DFX with selected issues and solutions.