UNIVERSITY OF NORTH TEXAS

COMPUTER SCIENCE & ENGINEERING

UNT CSE STUDENT NEWSLETTER

February 2013 Edition

Department of Computer Science and Engineering News

Student News

College of Engineering News

Greetings from the CSE Chair

Dear CSE Students,

Hope your Spring semester has started off well. Our CSE Department is beginning the semester by searching for a faculty member in the security area. We will be interviewing candidates during the next few weeks. Faculty, staff and students are invited to attend the talks by faculty candidates. Please check your email and the signs posted by the door of the main office of the CSE department for the names of the candidates and the title and location of these talks.
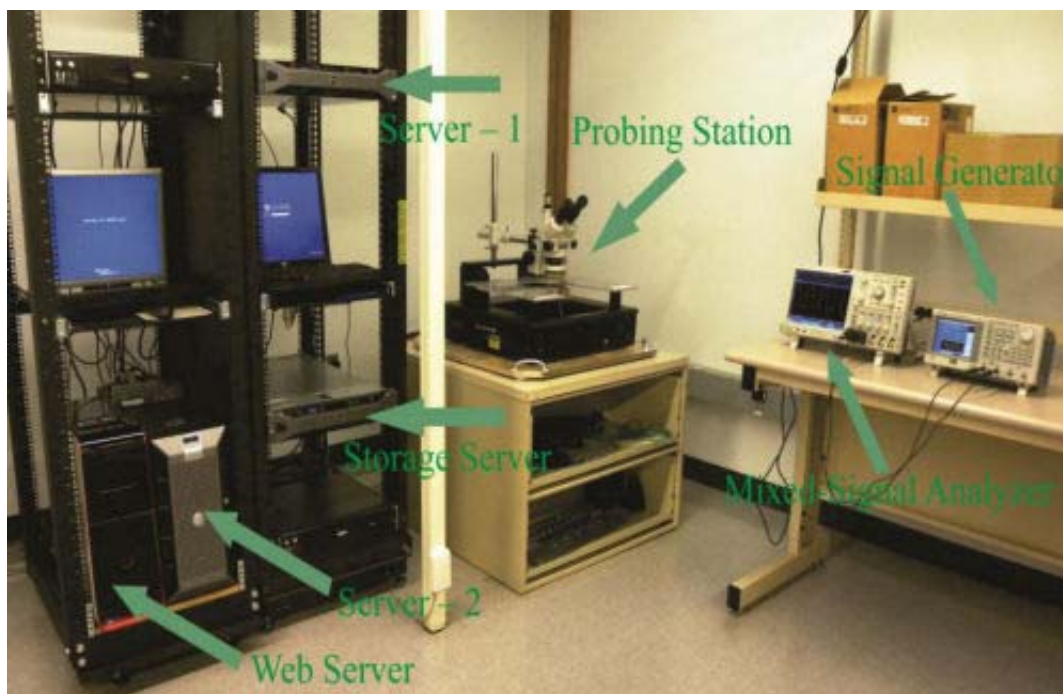
Congratulations again to Dr. Kavi and the Net-Centric IUCRC on winning the Tech Titan

Pilani University, India. Over the past year he worked on Search Engine Optimization and created a clustering algorithm based on Semantic Analysis and Graph Theory. Abhiraj has been heavily involved with marketing activities of his institute festivals. He is also a huge soccer fan.

- **Chengyuan Zhuang** is an MS student who graduated from Beijing University of Posts and Telecommunications with his Bachelor's Degree in Computer Science and Technology. He has received several science competition awards in math and physics from primary school to high school. "Edi" has a great interest in Natural Language Processing and is now in an education project under the direction of Dr. Nielsen. He likes to watch movies, listen to music, and walk. He likes to make friends too.

Welcome to all the new LIT members! ↑

News from NanoSystem Design Laboratory (NSDL)

The NanoSystem Design Laboratory (NSDL) had a very productive year of 2011-2012. During this time, 6 peer-reviewed journal papers were published and 16 conference publications were presented. A book was co-authored by Prof. Mohanty and additionally two patents were filled through UNT. NSDL has now 3 PhD, 2 masters, and 2 undergraduate students actively engaged in cutting edge research in nanoelectronics.

Selected journal and transaction publications which include student co-authors are the following:

- O. Garitselov, S. P. Mohanty, and E. Kougianos, "A Comparative Study of Metamodels for Fast and Accurate Simulation of Nano-CMOS Circuits", *IEEE Transactions on Semiconductor Manufacturing (TSM)*, Vol. 25, No. 1, February 2012, pp. 26-36.

- S. P. Mohanty, E. Kougianos, and O. Okobiah, "Optimal Design of a Dual-Oxide Nano-CMOS Universal Level Converter for Multi-Vdd SoCs", *Springer Analog Integrated Circuits and Signal Processing Journal*, Vol. 72, No. 2, August 2012, pp. 451-467.

NSDL PhD candidate, **Geng Zheng**, made two presentations at GLSVLSI 2012 in Salt Lake City, UT. In particular, the following paper is related to his PhD dissertation:

- G. Zheng, S. P. Mohanty, E. Kougianos, and O. Garitselov, "Verilog-AMS-PAM: Verilog-AMS integrated with Parasitic-Aware Metamodels for Ultra-Fast and Layout-Accurate Mixed-Signal Design Exploration", in *Proceedings of the 21st ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI)*, pp. 351--356, 2012.

Another NSDL PhD candidate **Karo Okobiah** made the following presentation at the International Symposium on Quality Electronic Design (ISQED) held at Santa Clara, CA:
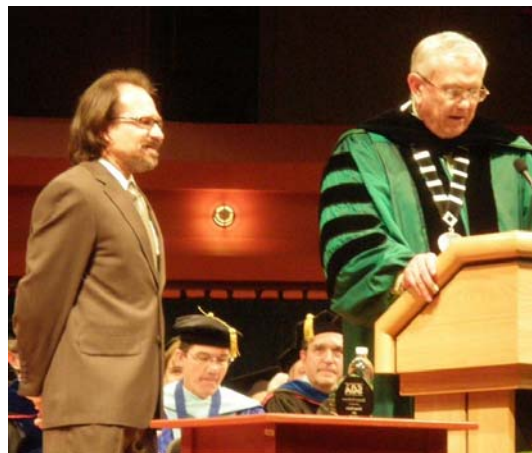
- O. Okobiah, S. P. Mohanty, and E. Kougianos, "Ordinary Kriging Metamodel-Assisted Ant Colony Algorithm for Fast Analog Design Optimization", in *Proceedings of the 13th IEEE International Symposium on Quality Electronic Design (ISQED)*, pp. 458-463, 2012.

Both Geng and Karo also made presentations at IEEE Computer Society Annual Symposium on VLSI (ISVLSI 2012) which was held at Amherst, MA. Two papers were also presented at a VLSI Design Conference held in Hyderabad, India to which student members of NSDL traveled. ↑

UNT Award Nominations Due March 1

Nominations for two prominent UNT awards are now being accepted.

- **The Alton Thibodeaux Award** is presented to a member of the University of North Texas community who exemplifies work and dedication to promoting diversity and multiculturalism. The award was inspired by Alton Thibodeaux who served in many capacities for the University of North Texas including administrator and advisor. Applicants will be judged on their involvement and dedication to diversity at UNT. The recipient will be selected by a committee of students, faculty, and staff members. You can even nominate yourself!

CSE Professor Armin R. Mikler received the 'Fessor Graham Award from UNT President V. Lane Rawlins at Honors Day in May 2011

- Nominate your favorite or outstanding professor for the **'Fessor Graham Award**. Named for the late Professor Floyd Graham, this award is presented to a faculty member for outstanding and unselfish service to students. The 'Fessor Graham Award is the highest honor given by the student body. A student committee selects the 'Fessor Graham recipient and an additional five Honor Professor award recipients. Professors will be judged on teaching excellence, outstanding and unselfish service, publications and scholarly work, and length of service to the university and community.

Nominations are due March 1, 2013 at 5 pm in the SGA Office in Union 322AA. Nomination forms are available at this SGA website. Winners will be announced at UNT Honors Day on