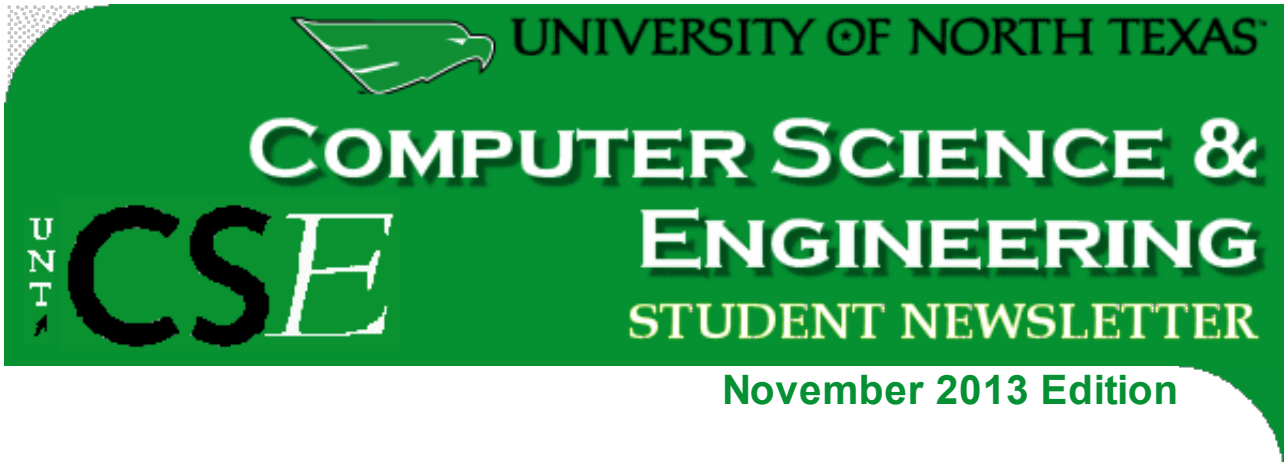


Department of Computer Science and Engineering News

Student News

College of Engineering News

Greetings from the CSE Chair

Dear CSE Students,

The end of our Fall semester is approaching and I wanted to share the news of our CSE Department with you. We were visited by ABET evaluators in the past month to reaccredit our Computer Engineering B.S. program and accredit for the first time our Information

Dr. Kavi at the entrance to the Edinburg castle.

Dr. Krishna Kavi, Director of the Computer Systems Research Lab (CSRL and the NSF Net-Centric Industry / University Cooperative Research Center IUCRC), traveled to Edinburg, Scotland in September 2013 to present a paper titled "MT-SDF: Scheduled dataflow architecture with mini-threads" at a workshop on Dataflow Models held in conjunction with Parallel Architectures and Compiler Technologies conference. The conference was held on the campus of the University of Edinburg.

During this trip, Dr. Kavi met **Dr. Richard Kenway**, the Director of the High Performance Computing center at the University of Edinburg. Kavi discussed possible collaborations with Dr. Richard Kenway. Dr. Kenway was very enthusiastic about collaborating with Dr. Kavi's research group and the NSF Net-Centric Industry/University Cooperative Research Center. ↑

Professor Mohanty Guest Edits Journal Special Issue on Nanoelectronics

Dr. Saraju Mohanty was a guest editor for a special issue titled "Design Methodologies for Nanoelectronic Digital and Analog Circuits" for IET Circuits, Devices & Systems (CDS) Journal, which was published as its Volume 7, No. 5, on September 2013. In the current semiconductor technology trend, while the nanoscale MOSFET is still doing well, other nanoelectronics technologies like Multigate FET, Graphene FET, Tunnel FET, are being researched widely as possible successors. In fact, the triple FET has been used in fabricating current high-end processors.

The new technologies may provide new mechanisms to address key issues in the processor design including power consumption, thermal effects, process variation, reliability, and security while at the same time bring new unknown problems for the design engineers. Overall making robust and efficient chips with high yield while addressing the known and unknown design issues

need research. The special issue brings selected papers to drive this research.

Prof. Mohanty was also a guest editor for another special issue titled "Advanced Techniques for Efficient Electronic System Design", for Springer Circuits, Systems, and Signal Processing Journal", which was published as its Volume 32, Issue 6, on December 2013. This special issue of electronic system design including the multi-standard communication, digital watermarking, memory Integrity detection and protection in embedded systems, and information security in a system-on-a-chip (SoC).

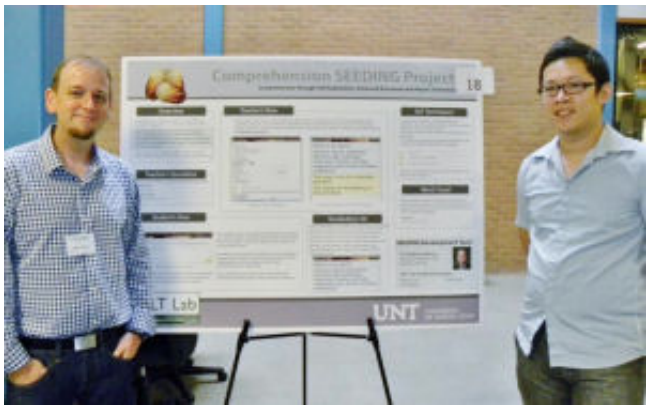
In the other news from NanoSystem Design Laboratory (NSDL), Dr. Mohanty has been invited to deliver a keynote address at IEEE Sponsored International Conference on Control, Automation, Robotics and Embedded System (CARE), to be held during 2013. CARE 2013 is organized by IIIT, Jabalpur, India. ↑

New members join Human Language Technologies Lab

The Human Language Technologies (HiLT) Lab, directed by **Dr. Rodney Nielsen**, has been growing. With a new name, the HiLT Lab replaces the former LIT Lab. Currently, the HiLT Lab's major projects include the Comprehension SEEDING Project, researching new forms of HLT-enabled educational technology that enable enhanced classroom discourse, and the Companionbots project, researching HTL-enabled health and wellbeing interactions with the elderly. Check out more on the new HiLT Lab website at http://hilt.cse.unt.edu/ or, for up-to-date information, follow them on twitter @hiltlab.

AWARDS:

James Glenn and **Mingyu Lin** won the best poster award at this year's Showcasing Undergraduate Research in Engineering event (see more details in the College of Engineering section in this newsletter).



NEW MEMBERS:

We are happy to introduce some new additions to the team.

Keerat Baweja is a junior at the Texas Academy of Math and Science at University of North Texas campus. TAMS is a two-year academic curriculum focused on mathematics and science that allows students to complete their high school diploma while earning college credits. Keerat is interested in the field of robotics and has participated in various competitions. She has joined Dr. Rodney Nielsen's HiLT lab to learn about the field of computational linguistics. She is really excited to be a part of this lab and is looking forward to expanding her knowledge and skills.

Benjamin Garside is an undergraduate student working towards his BS in Computer Science. He was selected to participate in UNT's Research Experience for Undergraduates program during the summer of 2013, where he researched combinatorial testing, regression testing, and user-generated test-case prioritization algorithms. Currently, he is testing as part