

November 2015 Edition

Department of Computer Science and Engineering News

CSE Professor Ian Parberry named a Distinguished Scientist by ACM

UNT CSE at the Grace Hopper Celebration of Women in Computing

Dr. Barrett Bryant presents Keynote about CSE Department Research

Dr. Armin Mikler receives UNT Research Leadership Award

Professor Mohanty receives Air Force Contract

NSF Net-Centric & Cloud Software & Systems (NCSS) Industry & University Cooperative Research Center (I/UCRC) News

Student News

- CSE Ph.D. Student wins Three Minute Thesis Competition
- CSE Database Students win DHISCO Big Data Challenge
- CSE PhD student is runner-up in MLBAM + NYC Media Lab Challenge on Automated Video Annotation
- CSE Students attend National SWE Conference
- CSE Graduate Students recruit students at UNT Grad Studies Expo

College of Engineering News

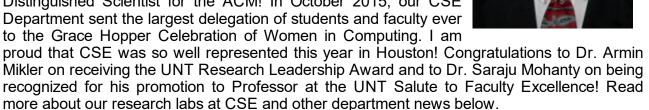
Showcase of Undergraduate Research in Engineering (SURE) CSE Alumna recognized by the College for her service

Greetings from the CSE Chair

Dear CSE Students,

Before Fall 2015 ends, I want to share with the outcome of our ABET accreditation visit this semester. An ABET team came in early November and evaluated our B.A. in Information Technology and B.S. in Computer Science programs. While the results will not become official until summer, I believe that we have passed our accreditation with a few changes to our assessment process. Our next accreditation visit by ABET will be for all three of our undergraduate programs in 2019-2020. Thanks to all the faculty, students, alumni, and Advisory Board members who helped us achieve our accreditation!

Congratulations to Dr. Ian Parberry on being named a Distinguished Scientist for the ACM! In October 2015, our CSE Department sent the largest delegation of students and faculty ever to the Grace Hopper Celebration of Women in Computing. I am



CSE Professor **Dr. Armin Mikler** received the **UNT Research Leadership Award** at the UNT Faculty Excellence celebration on October 2, 2015. Before that, Dr. Mikler presented the **2015 Distinguished Research Lecture** at the Salute to Faculty Excellence in Research and Creativity on September 30th.

Dr. Mikler's presentation "Finding Research in Unexpected Places: The Story of RE-PLAN" was about his research as Director of the Center for Computational Epidemiology and Response Analysis. To see pictures and a video of Dr. Mikler's lecture, please see this media gallery page. Congratulations to Dr. Mikler on receiving this honor! ↑



Dr. Armin Mikler and CENG Dean Dr. Costas Tsatsoulis



Professor Saraju Mohanty has been awarded a U.S. Air Force contract. The project titled "Memory Design Optimization for Low-Latency Embedded Vision Processor (LLEVS)" is exploring options for fast memory optimization for application specific processors. More information about the contract is available at this website.

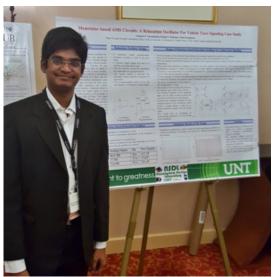
Professor Mohanty believes that the significant experience of his group on memory design and its optimization will lead to major success in developing energy efficient and high performance memory. The recent two patents granted to Dr. Mohanty have received widespread recognition. UNT Faculty Success published an article titled "Engineering Professors Awarded

Multiple Patents to Innovate Integrated Circuit Design" which appeared in the latest newsletter.

The College of Engineering published this article "Researchers Receive Patent for a Method for Designing Complex, Mixed-signal Circuits" to discuss the new patent. Professor Mohanty has been inducted to the editorial board of IEEE Consumer Electronics Magazine as a senior editor. His responsibility as the senior editor is to oversee special issues for the magazine.

Ph.D. candidates/students from the NanoSystem Design Laboratory (NSDL) travelled to ACM/IEEE International Conference on Computer-Aided Design (ICCAD), held in Austin, TX November 5-6, 2015. Prasanth Yanambaka, Shital Joshi, and Umar Albalawi attended. Prasanth and Shital would like to acknowledge travel support from the sponsors of the meeting: IEEE, Cadence, and Intel. Umar acknowledges support of the Saudi Arabian Cultural Mission for his travel. The following two papers were presented at Austin:

• S. Joshi, S. P. Mohanty, and E. Kougianos, "Unconventional EDA for Mixed-Signal Circuits: A Graphene FET based LC-VCO Case Study", *Frontiers in Analog CAD*



(FAC): International Workshop on Design Automation for Analog and Mixed-Signal Circuits, ACM/IEEE International Conference on Computer-Aided Design (ICCAD), November 5-6, 2015.

 P. V. Yanambaka, S. P. Mohanty, and E. Kougianos, "Memristor-based AMS Circuits: A Relaxation Oscillator For Vehicle Turn Signaling Case Study", *Frontiers in Analog CAD (FAC): International Workshop on Design Automation for Analog and Mixed-Signal Circuits, ACM/IEEE International Conference on Computer-Aided Design* (ICCAD), November 5-6, 2015.

1

NSF Net-Centric & Cloud Software & Systems (NCSS) Industry & University Cooperative Research Center (I/UCRC) News

The Net-Centric I/UCRC has a new Administrative Specialist, **Melanie Dewey**. She will be helping the Center Director, **Dr. Krishna Kavi**, and the Managing Director of the center, **Mr. David Struble**. Melanie's primary duties are marketing the center and recruiting new companies for membership.

The semi-annual Industrial Advisory Board meeting of the NCSS I/UCRC was held at the Gateway Center on the



UNT campus on October 14, 2015. The meeting was very successful with more than 50 attendees including current IAB members, potential industrial members, students, faculty and an NSF (National Science Foundation) evaluator. There were thirteen formal presentations, with several poster presentations included in the program. In addition, the meeting used video conferencing for the first time, which allowed participation by students and industry members from remote locations. Photos from the event can be found at the NCSS I/UCRC webpage.

David Hashe, a TAMS (Texas Academy of Mathematics and Sciences) student working with