UNIVERSITY OF NORTH TEXAS

COMPUTER SCIENCE & ENGINEERING STUDENT NEWSLETTER

September 2015 Edition

Department of Computer Science and Engineering News

Congressman Michael Burgess hosts Cyber-Security Roundtable at CSE
New Faculty Member at CSE
CSE Faculty receive National Center for Academic Excellence in Information Assurance Research (CAE-R) Designation
First Distinguished Speaker in Fall 2015
Dr. Renee Bryce receives NCWIT Undergraduate Research Mentoring Award
Building, Recruiting And Inclusion for Diversity
Bug Wars REU at CSE in Summer 2015
Grad Track offered for CSE Undergraduate Students
Top 10 Reasons for CSE Majors to Join Teach North Texas
CSE hosts Robocamp in Summer 2015
CSE Students participate in Big Data Challenge
Bill Buckles Chairs 6th IEEE ICCCNT
Prof. Mohanty has been Granted Multiple Patents by USPTO
News from Dependable Computing Systems Lab
News from Information Security and Privacy: Interdisciplinary Research and Education (INSPIRE) Lab
NSF Net-Centric & Cloud Software & Systems (NCSS) Industry & University Cooperative Research Center (I/UCRC) will meet in October 2015
Software Engineering Laboratory (SELL) News

Student News

Congratulations to CSE graduates
CSE Students defend Dissertations and Theses
Shijun Tang receives 2015 Toulouse Dissertation Award
CSE Student receives Linux Training Scholarship
Join ACM and Women in Computing Club!
CSE Students invited to join UNT SWE
CSE Graduate Students at STARS Celebration 2015
UNT SHPE invites CSE Students to join

College of Engineering News

Career Fair at Discovery Park on October 1
Showcase of Undergraduate Research in Engineering (SURE)

Greetings from the CSE Chair

Dear CSE Students,

Welcome to our CSE Department in Fall 2015! Dr. Hyunsook Do is joining our CSE faculty and we welcome her to our department! Congratulations to Dr. Saraju Mohanty on his promotion to Professor! Congratulations to Dr. Renee Bryce on her NCWIT Undergraduate Research Mentoring Award! This Fall ABET will visit and evaluate our B.S. in Computer Science and B.A. in Information Technology programs. The CSE Department is proud to offer programs that are accredited by ABET.

Invited speakers included Vivek Goyal (Boston University, IEEE Fellow, ACM Fellow), Upendra N. Singh (NASA Langley, SPIE Fellow), Krishna Kavi (UNT), and Masahiro Fujita (University of Tokyo). Participants, many of whom visited UNT on the last day, came from India, Taiwan, Oman, Australia, Korea, Norway, and many other countries.

The conference is unique in that it mixes on-site lectures with Skype lecturers having more limited access to international travel support. Eighty-one full papers, each peer-reviewed were represented on the program. Images from the event can be viewed at this Flickr link. ↑

Prof. Mohanty has been Granted Multiple Patents by USPTO

Professor Mohanty as a Program Chair Inaugurating ISVLSI 2015 held at Montpellier, France.

Professor Saraju Mohanty has been granted multiple patents by the United States Patent and Trademark Office (USPTO). A patent titled Intelligent Metamodel Integrated Verilog-AMS for Fast and Accurate Analog Block Design Exploration with US Patent Number 9,026,964 was issued on May 5, 2015. This patent presents an idea called iVAMS which makes system-level models described in Verilog-AMS circuit aware by making metamodels from the circuits and including them in Verilog-AMS thus bridging the gap of circuit-level and system-level descriptions.

The overall iVAMS is circuit-level accurate while having capability of system-level high-speed simulations. Therefore iVAMS is a paradigm shift idea in electronic design automation that can allow full-chip parasitic simulation of the analog/mixed-signal (AMS) circuits which is not easily possible in traditional analog simulator like SPICE. As UNT president Neal Smatresk @UNTPrez tweeted on May 20, 2015: "#UNT, invention, patent...3 words that describe how our researchers solve problems and create new technologies! @UNTEngineering."

Another patent titled Methodology for Nanoscale Technology based Mixed-Signal System Design with US Patent Number 9,053,276 was issued on June 9, 2015. This patent presents several new design optimization methods that can speed up the design exploration process of AMS circuits by 10,000X. This creates the possibility of reducing non-recurrent design cost of the chip and making electronics for larger mass of the society.

Prof. Mohanty as a Program Chair Inaugurating ISVLSI 2015 held at Montpellier, France

Professor Mohanty was a program chair for the 14th edition of **ISVLSI** which was held at Montpellier, France during Summer 2015. ISVLSI 2015 is a sponsored meeting of IEEE-CS which is very well attended by researchers around the globe. It had a total of 34 technical sessions and 2 keynote addresses from Industry researchers.

University of North Texas received major visibility during this conference in France. Prof. Mohanty, as Chair of the Technical Committee of VLSI, attended the IEEE Panel of Conference Organizers (POCO) held in Glasgow, Scotland. IEEE POCO gave very good detailed information to conference organizers in what is involved in organizing a conference. Prof. Mohanty acknowledges the travel support from IEEE-CS TCVLSI as well as from Cadence Academic Network for his conference travels during summer.

In the other news from the **NanoSystem Design Laboratory** (NSDL), Ph.D. candidate **Shital Joshi** travelled to ISVLSI 2015 to present the following two papers:

- S. Joshi, E. Kougianos, and S. P. Mohanty, "Simscape based Ultra-Fast Design Exploration of Graphene-Nanoelectronic Systems", in Proceedings of the 14th IEEE Computer Society Annual Symposium on VLSI (ISVLSI), 2015, pp. 292—296.

- E. Kougianos, S. Joshi, and S. P. Mohanty, "Multi-Swarm Optimization of a Graphene FET Based Voltage Controlled Oscillator Circuit", in Proceedings of the 14th IEEE Computer Society Annual Symposium on VLSI (ISVLSI), 2015, pp. 567—572.

ISVLSI is an IEEE-CS sponsored meeting which is a quite selective venue and follows a double blind review process for paper selection. Shital had a very good experience at his first international conference presentation. ↑

News from Dependable Computing Systems Lab