UNIVERSITY OF NORTH TEXAS

COMPUTER SCIENCE & ENGINEERING

ALUMNI NEWSLETTER

Greetings from the CSE Chair

September 2013

Dear CSE Alumni and Friends,

The Fall 2013 semester has begun! We welcome our new faculty member, Dr. Hassan Takabi, who will be working in computer security. We want to congratulate Dr. Paul Tarau on his promotion to Professor and David Keathly on his promotion to Principal Lecturer. Our CSE Department is growing and we will be searching for three new faculty members this year.

Our BS in Computer Engineering program was first accredited in 2008 by ABET. We will be visited by evaluators from ABET in October for the reaccreditation of this program. Our BA in Information Technology program will be evaluated for first-time accreditation by ABET also in October. Our BS in Computer Science program will be evaluated in 2014. Our CSE Department is proud to offer ABET-accredited programs.

Our CSE Department has received state approval for us to prepare secondary teachers of Computer Science as part of the Teach North Texas program. Congratulations to our CSE students, James Glenn, Mingyu Lin, Zachary Morgan, and Jason He, who won awards at the first College of Engineering's Showcase for Undergraduate Research. Please read below about all the activities of our faculty and students.

The press release states that "with support from the National Science Foundation (NSF), his team designed several innovative smart phone apps that virtually place 9-1-1 operators at the scene of an emergency, allowing them to quickly and accurately collect information, assist victims and help first responders save lives."

To see the NSF press release and the videos, please see this College of Engineering **article** .

Dr. Mohanty awarded U.S. patent for digital video security methods

Dr. Saraju Mohanty, Associate Professor in the CSE Department, has been awarded a U.S. patent for his "Apparatus and Method for Transmitting Secure and/or Copyrighted Digital Video Broadcasting Data over Internet Protocol Network."

His invention provides comprehensive solutions for securing digital video, and it offers advantages for content providers like Netflix, digital television companies, Hollywood movie studios, their distributors and end-users, and private parties posting to YouTube or sending video files over the internet.

For more details about Dr. Mohanty's patent, please read this **press release** Dr. Mohanty directs the **NanoSystem Design Laboratory** in the CSE Department.

CSE faculty and PhD graduate co-chair ICCCNT 2013

North Texas in August, and continued immediately to graduate school. During her undergraduate career at UNT, Natalie served as an Engineering Ambassador for the College of Engineering and received numerous academic scholarships and awards, including the Honors Scholar Award granted by the UNT Honors College. She coauthored several publications as part of her undergraduate research with UNTANGLED, an interdisciplinary project between UNT's Computer Science and Electrical Engineering departments that received the People's Choice Award in the Games & Apps category of the 2012 International Science & Engineering Visualization Challenge, conducted by the National Science Foundation and Science magazine. Natalie's primary research interests are in Natural Language Processing, and she looks forward to advancing her academic career in the coming semesters as a member of Dr. Nielsen's lab.

Master's Student:

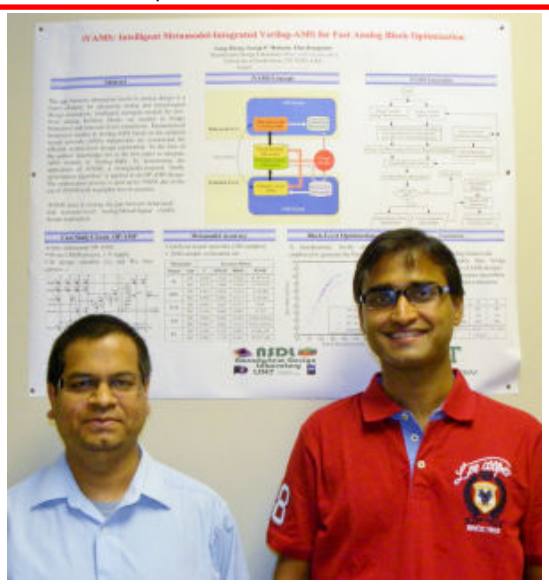
Anil Kumar Veerepally, after completing his bachelors from JNTUH, India, worked for Amazon Dev Centre for 3 years in Seller Experience Technology team and led the Support Engineers. Anil is now a Master's Student, specializing in Artificial Intelligence and is working for Dr. Rodney Nielsen's Companionbots Project. He likes to spend time eating chocolates, playing cricket and watching movies.

Student Award:

Karen Mazidi, a second-semester PhD student, was recently selected to participate in the UNT Graduate Student Research & Fellowship Support Program. This program consists of workshops on preparing proposals for grants and fellowships, and mentoring during the writing and application process. Thirty students were selected from across all disciplines of UNT graduate students.

UGC Raman Research Fellow Visits NanoSystem Design Laboratory (NSDL)

University Grant Commission, Government of India, Raman Research



Dr. Mohanty and Dr. Ghosal

Fellow, **Dr. Prasun Ghosal** visits NSDL for a year for research collaboration. The fellowship is highly competitive which aims to facilitate the interactions of the researchers from India with the USA academic/scientific community to learn new academic and scientific research methods and to participate in collaborative research. The fellowship provides funds of $3,000 per month for 12 months and $1,200 conference travel. Dr. Ghosal is a faculty member at the Bengal Engineering and Science University (BESU), the 2nd oldest Engineering institute in India. His research interests include VLSI physical design algorithm, Network-on-a-Chip (NoC), and quantum circuits. He is particularly interested to collaborate in nanoelectronic design, optimization, and design flow needed for nanoelectronic circuits.

In the other news from NSDL, members from NSDL published a total of 4 journal papers and 8 conference papers in the current year. NSDL PhD candidate Karo Okobiah made multiple presentations at different double-blind review conferences including one at the **International Symposium on Quality Electronic Design** International Symposium on Quality Electronic Design]] held at Santa Clara, CA. NSDL PhD candidate Karo Okobiah and visiting scholar Dr. Ghosal made multiple presentation at the 56th IEEE International Midwest Symposium on Circuits & Systems (**MWSCAS**), Columbus, OH. The presentations made include the following:

- G. Zheng, S. P. Mohanty, E. Kougianos, and O. Okobiah, "Polynomial Metamodel Integrated Verilog-AMS for Memristor-Based Mixed-Signal System Design", in *Proceedings of the 56th IEEE International Midwest Symposium on Circuits & Systems (MWSCAS)*, 2013, pp. 916--919.

- O. Okobiah, S. P. Mohanty, and E. Kougianos, "Fast Statistical Process Variation Analysis using Universal Kriging Metamodeling: A PLL Example", in *Proceedings of the 56th IEEE International Midwest Symposium on Circuits & Systems (MWSCAS)*, 2013, pp.

CSEAlumni@unt.edu

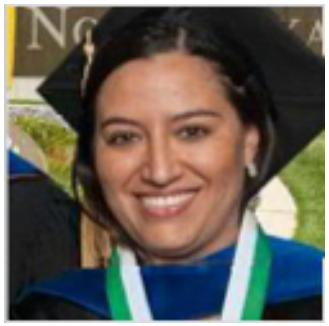
Student News

Congratulations to CSE graduates

Congratulations to all of our Department of Computer Science and Engineering graduates in **Spring 2013** and **Summer 2013** !

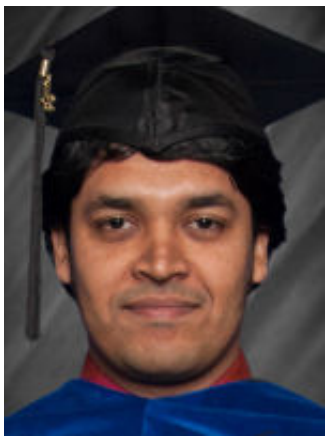
PhD Graduates in Spring 2013

Carmen Banea
Dissertation: "Extrapolating Subjectivity Research to Other Languages"
Major Professor: Rada Mihalcea



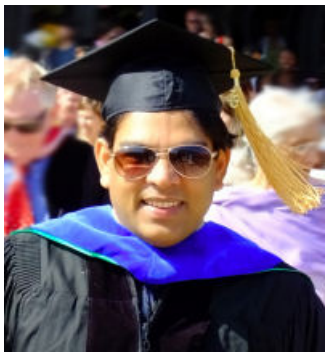
Olivia Glicine Loza
Dissertation: "Optimizing Non-Pharmaceutical Interventions using Multi-Coaffiliation Networks"
Major Professor: Armin Mikler

Ravi Som Sinha
Dissertation: "Finding Meaning in Context using Graph Algorithms in Mono- and Cross-Lingual Settings"
Major Professor: Rada Mihalcea



Geng Zheng
Dissertation: "Layout-Accurate Ultra-Fast System-Level Design Exploration through Verilog-AMS"
Major Professor: Saraju P. Mohanty

PhD Graduates in Summer 2013



Dhanyu Eshaka Amarasinghe
Dissertation: "Real-time Rendering of Burning Objects in Video Games"
Major Professor: Ian Parberry

Enkh-Amgalan Baatarjav
Dissertation: "Privacy Management for Online Social Networks"
Major Professor: Ram Dantu

Bharath Dandala