

Department of Computer Science and Engineering News

CSE Projects to be presented on Senior Design Day on April 25

Final Distinguished Speaker in Spring 2014

UNT Computer Science Degree ranked 7th nationally in return on investment

CSE Graduate Student Natalie Parde wins NSF Graduate Research Fellowship

CSE Cyber Defense team places third in Southwest CCDC

Robocamp and Grandparents University

Dr. Bryant attends Consortium for Computing Sciences in Colleges

Dr. Krishna Kavi in the news about an Alternative to Black Box in Airplanes

Prof. Mohanty appointed to the editorial board of multiple international journals and NSDL news

News from the AI and Human Language Technologies (HiLT) Lab

CSRL and Net-Centric IUCRC News

Laboratory for Recreational Computing News

News from Software Engineering Language Laboratory (SELL)

CSE appreciates Graduate Students

Student News

Outstanding Doctoral Student in Computer Science and Engineering – Oghenekarho Okobiah

Outstanding Master's Student in Computer Engineering – Sunitha Karlaputi

Outstanding Master's Student in Computer Science – Siyuan Liu

Outstanding Undergraduate Student in Computer Engineering – Jose Barcenas

Outstanding Undergraduate Student in Computer Science – Dillon Fisher

Outstanding Undergraduate Student in Computer Science – Hudson Jameson

Outstanding Undergraduate Student in Information Technology – Nathan Thurmond

Outstanding Computer Science and Engineering Sophomore Student Award – Christopher Wolfe

Outstanding Computer Science and Engineering Freshman Student Award – Mindy Nguyen

PepsiCo Scholarship Award

Outstanding Graduate Instructional Assistants

CSE Students defend Dissertation and Thesis

CSE Students recognized at UNT Graduate Exhibition

College of Engineering News

Students from Thailand visiting CENG for SUPER

College of Engineering opens new laboratory and gets a sixth department

Greetings from the CSE Chair

Dear CSE Students,

On Friday, many of our senior undergraduate students will make presentations at the College of Engineering's Design Day. Students in capstone classes will be presenting their posters in front of our department between 9 and 11 am. Following that, each group will give

Prof. Mohanty appointed to the editorial board of multiple international journals and NSDL news

Professor Saraju Mohanty has been appointed to the editorial board of two international journals recently. The IET Circuits, Devices & Systems (IET-CDS) journal publishes VLSI and CAD for VLSI research focusing both traditional and emerging technologies including nanoelectronics and MEMs. The Elsevier Integration Journal has the scope of various areas of VLSI including specification methods and languages for both analog/digital ICs and Systems.



In other NSDL news, the NSDL members have published many journal papers including the following:

- S. P. Mohanty and E. Kougianos, "Incorporating Manufacturing Process Variation Awareness in Fast Design Optimization of Nanoscale CMOS VCOs", IEEE Transactions on Semiconductor Manufacturing (TSM), Volume 27, Issue 1, February 2014, pp. 22-31.
- O. Okobiah, S. P. Mohanty, and E. Kougianos, "Fast Layout Optimization through Simple Kriging Metamodeling: A Sense Amplifier Case Study", IEEE Transactions on Very Large Scale Integration Systems (TVLSI), Volume 22, Issue 4, April 2014, pp. 932-937.

In addition, multiple conference papers have been either accepted or published. NSDL PhD **Karo Okobiah** travelled to the International Symposium on Quality Electronic Design (ISQED) 2014, Santa Clara, CA. His presentation at ISQED 2014 included the following:

- O. Okobiah, S. P. Mohanty, and E. Kougianos, "Kriging Bootstrapped Neural Network Training for Fast and Accurate Process Variation Analysis", in Proceedings of the 15th IEEE International Symposium on Quality Electronic Design (ISQED), 2014, pp. 365-372 (blind review).

NSDL postdoctoral scholar **Dr. Prasun Ghosal** as well as PhD candidate Karo Okobiah made presentations at IEEE Texas Workshop on Integrated System Exploration (TexasWISE) during March 21, 2014 which was held in University of Texas at Austin. The following two presentations were made:

- Exploring Kriging for Fast and Accurate Design Optimization of Nanoscale Analog Circuits
- Architectural and Layout Level Optimization of Performance Centric 3D Nanosystem Design

PhD candidate **Karo Okobiah** successfully defended his PhD dissertation on February 13, 2014. The CSE Faculty selected Karo as the Outstanding Doctoral Student in Computer Science and Engineering and he was recognized at the 2014 UNT Honors Day. ↑

News from the AI and Human Language Technologies (HiLT) Lab

HiLT Lab members have won two awards. **Natalie Parde**, on the left, won an NSF Graduate

students for helping in our department. The Toulouse Graduate School provided a goody bag of gifts for students and the Department offered students a cake with the printing "Thank You." Dr. Bryant gave a short speech and thanked all the graduate students in our CSE Department. See more pictures from [Graduate Student Appreciation Day](#). ↑



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Student News

CSE faculty members selected the following outstanding students in the Department of Computer Science and Engineering who were recognized at the UNT Honors Day on April 4, 2014.

Outstanding Doctoral Student in Computer Science and Engineering – Oghenekarho Okobiah

Oghenekarho (Karo) Okobiah received his B.S in Electrical Engineering from South Dakota State University, Brookings in 2008. His interest in chip and processor design led him to pursue his Masters in Computer Engineering. He joined UNT and received his MS in Computer Science in 2010 and immediately continued as a PhD student under supervision from Dr. Saraju Mohanty and co-supervisor Dr. Elias Kougianos. His area of interest is Nanoscale VLSI Systems Design with emphasis on Mixed-Signal Circuit Design and Optimization.

Karo received the Graduate Academic Tuition Scholarship for the year 2011. He was also awarded fellowship to attend the ACM A.M. Turing Centenary Celebration in San Francisco, CA, in the summer of 2012, and a fellowship to attend the ACM SIGDA Design Automation Summer School (DASS) in San Diego, CA, in the summer of 2011. He was awarded the Outstanding Masters Student in



Computer Engineering.

Karo has more than 15 peer-reviewed IEEE/ACM publications. He serves as a Program Committee Member of IEEE IEDEC, IEEE ISQED and IEEE ASQED, and a reviewer for over 15 technical conferences/Journals. He defended his PhD dissertation titled "Geostatistical Inspired Metamodeling and Optimization of Nanoscale Analog Circuits" on February 13, 2014. ↑

Outstanding Master's Student in Computer Engineering – Sunitha Karlaputi

Sunitha Karlaputi received her Electronics and Communications Bachelor's degree from J.N.T University, Hyderabad, India in 2011 and later worked as a Systems Engineer at Hewlett Packard Company, Chennai, India. She started her Computer Engineering Graduate program at UNT in Fall 2012 with VLSI as a specialization. In addition to VLSI, she has also shown interest in Networking and Systems Virtualization research.



Outside of school, Sunitha enjoys other activities like cooking, dancing and shopping. She thanks her major professor Dr. Saraju P. Mohanty for his support and advice. Sunitha feels fortunate to have a wonderful family, especially her father Mr. Venkata S. Karlaputi who was/is always been behind his daughter's success and her husband Mr. Pavan for his encouragement. She also thanks everyone in the CSE department, friends and her past mentors for supporting her to complete her Master's in May 2014. ↑

Outstanding Master's Student in Computer Science – Siyuan Liu

Siyuan Liu received his BS in Electronic Information from Kunming University of Science and Technology in China in July 2007. After that, he found a job in a real estate company. After 3 years of work there, he realized that he preferred a creative job, like being a programmer or computer engineer. Therefore, he quit his job and came to UNT.

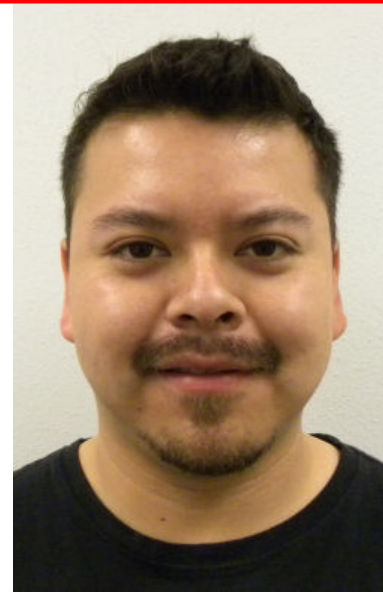


Siyuan started his graduate program in Computer Science in the Fall semester of 2011. His area of interest is computer vision. His major professor Dr. Xiaohui Yuan gave him great support in his research. Siyuan will defend his thesis titled "Simulation of Micro Mirror Array and Far Field Diffraction Pattern" during the summer semester. He is co-author on a conference paper which was selected to be presented at SPIE Defense Security Sensing (SPIE.DSS) 2014.

Finally, Siyuan thanks his major professor, Dr. Xiaohui Yuan, for his patience and guidance. Siyuan also thanks his wife for her support and his 6 month old baby for the pleasure of being a father. During his free time, Siyuan likes to read fiction and listen to pop music. ↑

Outstanding Undergraduate Student in Computer Engineering – Jose Barcenas

Jose Barcenas transferred to UNT in Fall 2010 from Weatherford College. He will graduate this coming May with a Bachelors of Science in Computer Engineering and a minor in Mathematics. His primary interest is in VLSI and Electronics. His current projects include a Directed Study in Nanoelectronics with Dr. Saraju Mohanty and a senior design project. The directed study involves taking a previously designed "Hybrid Memristor-CMOS Based Programmable Oscillator" and formulating a process variation on the design. His senior design project includes a hearing aid device that is able to enhance high frequency audio for people with hearing disabilities.



In summer 2013, Jose worked at Texas Instruments as a Software Engineering Intern. He worked on the display sub-system architecture of a System on a Chip developed by Texas Instruments.

Jose will continue his education at the University of Michigan, pursuing a Master's in Electrical Engineering with a concentration on Solid State Devices and Nanotechnology. He was also awarded the Michigan Engineering Master's Fellowship. He plans to have a career in nanofabrication and semiconductors. ↑

Outstanding Undergraduate Student in Computer Science – Dillon Fisher

Dillon Fisher is a 4th year student who plans to graduate in May of 2014 with a bachelor's degree in Computer Science. His current projects include a published and active Android application called 'MineButler' as well as motion tracking software for digital video. Dillon has been on both the Dean's and President's Academic honor rolls and was named an Outstanding Student for the Computer Science department for the 2013-2014 year.



After graduation, Dillon will start working for Franklin American Mortgage Company as a Java developer. He plans to continue pursuing software development as a longterm career path.

Outside of classes, Dillon enjoys programming, playing video games, reading, cooking, and spending time with his girlfriend. ↑

Outstanding Undergraduate Student in Computer Science – Hudson Jameson

Hudson Jameson is a senior working towards a Bachelor's degree in Computer Science. His interests include analog to digital video conversion, Bitcoin, and Settlers of Catan. He will also soon be starting a VHS to DVD conversion business at easyvhstransfer.com.

He currently is employed with The Local Circuit Computer Repair in Denton as the lead technician. After graduating in May 2014, he will begin working at USAA in Plano as a software developer.



(L-R) Ian Brooks, Jorge Reyes-Silveyra, Sai Kalluri

Three outstanding graduate instructional assistants have been recognized by the CSE faculty. Outstanding Teaching Fellow is **Ian Brooks**. He is a Teaching Fellow for CSCE 4011 "Engineering Ethics." Ian is a graduate student seeking his PhD in Computer Science and Engineering. His major professor is Dr. Kathleen Swigger.

Outstanding Teaching Assistant is **Jorge Reyes-Silveyra**. Jorge is a PhD student in Computer Science and Engineering. He is a Teaching Assistant for CSCE 4110 "Algorithms" and CSCE 4820 "Computational Epidemiology." His major professor is Dr. Armin R. Mikler.

Outstanding Grader is **Sai Kalluri**. Sai is a Grader for CSCE 4410 "Software Development I" and CSCE 4444 "Software Engineering." Sai is an MS student in Computer Science. His major professor is Dr. Bill Buckles. ↑

CSE Students defend Dissertation and Thesis

Congratulations to this PhD student for successfully defending his dissertation!



Oghenekarho Okobiah

Dissertation: "Geostatistical Inspired Metamodeling and Optimization of Nanoscale Analog Circuits"

Major Professor: Dr. Saraju P. Mohanty

Defense Date: February 13, 2014

Congratulations to this MS student for successfully defending his thesis!

David Jensen

Thesis: "DDoS Defense Against Botnets in the Mobile Cloud"

Major Professor: Dr. Ram Dantu

Defense Date: March 24, 2014 ↑