Dear CSE Students,

I hope you’ve had successful Spring and Summer semesters! Welcome back to all of our students for another amazing year in the UNT Department of Computer Science and Engineering.

CSE continues to grow: joining our team this Fall is Assistant Professor, Dr. Mark Albert, Assistant Professor, Dr. Nagendra Gulur, and Assistant Professor, Dr. Yanyan He. Each of them joined us after successful terms in their previous field and we’re excited about the new opportunities they bring to our department.

Helping in our student instructional lab is CSE’s own, recent graduate and current Master’s student, Alejandro Olvera. He joined our team mid-July and is already setting up labs for Fall.

To support our front office, we’ve also welcomed our new Undergraduate Administrative Specialist, Kaleb Lambeth, and our Office Support Associate, Cameron Jones. Each will be immersed in UNT training for the next couple of months as they navigate through the Fall semester.

In other Department news, we would like to congratulate Dr. Hassan Takabi, on receiving the 2019 Office of Research and Innovation’s Early Career Award, Dr. Yan Huang for being awarded the 2019 Office of Research and Innovation’s Decker Scholar Award, and Dr. Ram Dantu for being featured in North Texas Innovation’s article “Who Are the Future, Today”. Be sure to read through our faculty news section down below!

We have some exciting things coming up this year 2019-2020! I invite you to get involved in some of the many activities in our CSE department. Starting this month, we will be updating our newsletters monthly and will have current content updated regularly on the CSE Facebook page. Please be sure to LIKE to keep up with all of the latest news.

Barrett Bryant
Dr. Mark Albert
Assistant Professor

Dr. Mark Albert will be directing the Biomedical AI lab. His primary appointment is with Computer Science and Engineering with a secondary appointment in Biomedical Engineering. For the past few years, he has also been an adjunct in the Department of Physical Medicine and Rehabilitation at Northwestern University and will continue that affiliation going forward at UNT. He received his PhD in Computational Biology from Cornell University, with an emphasis on applying efficient coding principles to computational neuroscience. He is a Fulbright Scholar from the University of Vienna and a graduate from Pittsburg State University.

Dr. Nagendra Gulur
Assistant Professor

Dr. Nagendra Gulur joins UNT after 20 years with Texas Instruments. He obtained his MS and PhD degrees from the Indian Institute of Science, Bangalore. At TI, he has donned a variety of hats: system modeling, embedded system design and system architecture. He lives with his wife and daughter and loves music, math, and coding.

Dr. Yanyan He
Assistant Professor

Dr. Yanyan He graduated from Florida State University in 2013 and stayed at the University of Utah as a Postdoctoral Fellow. She previously worked as an Assistant Professor for three years. Dr. He will now be an Assistant Professor in the Department of Mathematics and the CSE Department. Her research interests focus on uncertainty quantification (UQ) including parametric uncertainty analysis, uncertain data modeling, and uncertain data fusion.
Cameron Jones is the Office Support Associate for the CSE Department. She will be assisting with the front desk coverage, as well as completing our monthly newsletter and travel reimbursements. Stop by F201J to say hello!

Alejandro Olvera is the Instructional Lab Technician for the CSE Department. He will be working one-on-one to assist our Senior Design Teams in preparing their projects. Stop by F261 to say hello!

Kaleb Lambeth is the Administrative Specialist for the CSE Department. He will be working closely with Dr. Mikler on scheduling and with Dr. Ludi on Undergraduate matters. Stop by F201B to say hello!

Cameron Jones
Office Support Associate

Alejandro Olvera
Instructional Lab Technician

Kaleb Lambeth
Administrative Specialist

Cameron Jones
Office Support Associate
Sultanah Alshammari

Sultanah Alshammari was awarded the PhD Colloquium award at the 2019 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation (ACM SIGSIM PADS) in Chicago, Illinois, USA.

Congratulations to Sultanah Alshammari on successfully defending her Ph.D. Dissertation "A Data-Driven Computational Framework to Assess the Risk of Epidemics at Global Mass Gatherings" on March 5, 2019. Pictured from left to right are Dr. Rodney Nielsen, Dr. Susie Ramisetty-Mikler, Sultanah Alshammari, major professor Dr. Armin Mikler, Dr. Chetan Tiwari, and Dr. Song Fu.

Zhaochen Gu & Obianuju (Leah) Okafor

During a trip to Chicago, Ph.D. candidates Zhaochen Gu and Leah Okafor met with CSE alum, Dr. Natalie Parde, who is now working as an Assistant Professor at University of Illinois, Chicago. Dr. Parde was a student under faculty advisor, Dr. Rodney Nielsen, in the HILT lab.
CRA – W Grad Cohort

Zhaochen Gu, Leah Okafor, and Shraddha Pipparia won a scholarship to attend the CRA-W Grad Cohort Workshop in Chicago.

Left: Zhaochen Gu representing UNT CSE at the conference.

David Woodward, Tim Stern, & Juan Ruiz

Department of Computer Science and Engineering majors David Woodward, Juan Ruiz, and Tim Stern were recently featured on NBC DFW for their augmented reality goggles they developed for NASA’s Spacesuit User Interface Technology (SUITS) Design Challenge. Dr. Robin Pottathuparambil, Computer Science and Engineering Senior Lecturer, served as the advisor for the team. Associate Dean for Undergraduate Studies, Dr. Nandika D’Souza, Instructional Technician, Thomas Kanabay, and the Department of Computer Science and Engineering were all integral in helping the team. Please click HERE to view their feature on NBC DFW.
Ph.D. candidate, Manar Alohaly, attended the 34th International Conference on ICT Systems Security and Privacy Protection - IFIP SEC 2019, held at the University of Lisbon, Portugal on June 2019. While there, Manar presented a paper entitled "Towards an Automated Extraction of ABAC Constraints from Natural Language Policies." This paper was co-authored with two faculty members, Dr. Hassan Takabi and Dr. Eduardo Blanco.

The Spring 2019 Design Challenge Showcase was held on Sunday and Monday, April 14-15 at the South Shore Harbour Resort in League City, TX. Thirteen teams presented amazing solutions to their NASA challenges to an audience of NASA experts, team members, faculty and guests.

UNT Teams ERAM & Avengers placed 6th and 7th, respectively in the Top Design Teams challenge. Team ERAM placed 5th in the best poster category, Team Avengers placed 5th in best peer review.

Pictured left to right are Dr. Eduardo Blanco, Dr. Armin Mikler, Dr. Barrett Bryant, Dr. Joseph Helsing, Dr. Alexis Palmer, Dr. Mahzabeen Islam, Dr. Jinliang Wei, Dr. Zahra Sarabi, Dr. Alakananda Vempala, Dr. Sultanhah Alshammari, Dr. Nirosha Dinayadura.

Manar Alohaly
Two of our PhD students, Sampson Akwafuo and Aboubakar Mountapmbeme, attended the 2019 Computing Research Association (CRA) Graduate workshop held in Hawaii from March 22-23, 2019. During the workshop, students had the opportunity to interact with senior computing researchers and industrialists, from whom they learned useful knowledge and skills necessary for graduate studies.

They also presented posters on their research and received valuable feedback from participants.

**Farzana Rashid & Sampson Akwafuo**

Congratulations to CSE PhD students Farzana Rashid and Sampson Akwafuo! Both students were recipients of The GREAT grant.

The GREAT Grant supports international projects that advance the research/creative activities of UNT graduate students and enhance their global perspectives by providing a research experience outside of the U.S. GREAT Grant projects are for independent research/creative activities abroad and must align with the applicant’s graduate studies and research. The project must include a minimum of four (4) continuous weeks abroad. Sampson visited Ghana and Nigeria in July 2019 while Farzana visited Italy in May 2019. Congratulations to both of these talented students!

**Highlight from CRA Workshop**

Two of our PhD students, Sampson Akwafuo and Aboubakar Mountapmbeme, attended the 2019 Computing Research Association (CRA) Graduate workshop held in Hawaii from March 22-23, 2019. During the workshop, students had the opportunity to interact with senior computing researchers and industrialists, from whom they learned useful knowledge and skills necessary for graduate studies.

They also presented posters on their research and received valuable feedback from participants.
Rhythm Garg

Rhythm Garg attended the Fort Worth Regional Science and Engineering Fair (FWRSEF). There were hundreds of students who competed, and the event was held at UT Arlington.

He was awarded:

- 2nd overall at the fair. The top 6 overall advanced straight to the International Competition this May in Arizona.
- 1st in his category of Behavioral and Social Sciences.
- The American Psychological Association 1st Place Special Award.
- The Institute of Electrical and Electronics Engineers (IEEE) 2nd Place Special Award.

David Woodward & Juan Ruiz

On February 14th and 15th, David Woodward, Juan Ruiz, and faculty sponsor Dr. Joseph Helsing competed in the 2019 Lockheed Martin Ethics in Engineering Case Competition. Over the course of three rounds, they competed with 14 other universities from around the country examining and explaining the business, engineering, and ethical dilemmas of the required scenario. Their proposed solution to the case unfortunately came up just short of placing them in the final round, but this experience will better prepare them, and future teams, for next year’s competition. We are very proud of the hard work, time, and research David and Juan put into preparing for this year’s competition.
Pioneer Natural Resources visits CSE

Pioneer Natural Resources visited the Department of Computer Science and Engineering to identify prospective interns for their organization. Pioneer Natural Resources is a Texas-based independent and production company that aims to meet the world’s critical energy needs.

Twenty-two computer science and engineering majors attended an information session with Pioneer at the end of January. Pioneer presented an overview of their activities, work environment and opportunities for student internships and full-time employment. Pioneer internships provide students experience working on challenging, complex problems with the possibility for full-time employment with the company after graduation.

CCDC Team's trip to Regional Competition

Congratulations to the CCDC team, comprised of Chalet Shelton, William Lieto, Jeremiah Dickens, Brayden Cloud, Mason Hobbs, Bohan Zhang, Tristan Blessing, and Alexander Economy on advancing to the Southwest CCDC Regional, held in March. Their travel was supported by generous donor gifts that support activities such as these.

CCDC is a cyber-security competition in which college students pretend to be doing cyber security and networking work for a company. Throughout the competition, students are expected to do networking tasks (things like setting up an email server, or a DNS server) as well as some cyber security tasks (things like securing virtual machines, and discovering malicious user accounts and revoking their access). While this is happening, hackers (who are actually cyber security professionals) are attempting to infiltrate the student networks, while the students try to keep them out. There were 21 teams, and UNT was one of the top 8 teams.
Venkata Prasanth Yanambaka

Congratulations to Venkata Prasanth Yanambaka on successfully defending his Ph.D. Dissertation “Exploring Physical Unclonable Functions for Efficient Hardware Assisted Security in the “Internet of Things” on January 31, 2019. Pictured from left to right are Dr. Junghwan Oh, co-major professor Dr. Elias Kougianos, Venkata Prasanth Yanambaka, major professor Dr. Saraju Mohanty, and Dr. Xiaohui Yuan.

Mahzabeen Islam

Congratulations to Mahzabeen Islam on successfully defending her Ph.D. Dissertation “A Study on Flat-Address-Space Heterogeneous Memory Architectures” on March 18, 2019. Pictured from left to right are Dr. Barrett Bryant, major professor Dr. Krishna Kavi, Mahzabeen Islam, Dr. Hui Zhao, and Dr. Song Fu.

Zahra Sarabi

Congratulations to Zahra Sarabi on successfully defending her Ph.D. Dissertation “Revealing the Positive Meaning of a Negation” on March 22, 2019. Pictured from left to right are Dr. Rodney Nielsen, Zahra Sarabi, major professor Dr. Eduardo Blanco, Dr. Alexis Palmer, and Dr. Xiaohui Yuan.
Professor Keathly,

During every class I've had with you, you've always made a point to tell us how important it is to obtain a clear understanding of the problem before starting development on a project.

A few months ago, I had an interview with a project lead at Chevron. We were talking about a project he was working on, where his team is developing a progressive web application for engineers in the field. He was scheduled to go on-site to an oilfield later that week to interview some of the engineers that would be using his application. I quickly remembered what you have always told us & commended him for doing so, basically saying that there’s no point in developing an application if you don’t understand what the users will use it for.

If you would like to submit a “thank you” to a CSE faculty member or staff, send it to Cameron.Jones@unt.edu
Dr. Barrett Bryant, Chair, and Dr. Song Fu, Associate Chair for Computer Engineering, attended the annual meeting of the Electrical and Computer Engineering Department Heads Association (ECEDHA) in Tucson, Arizona, March 22-26. Dr. Bryant also accepted the Outstanding Chapter Award from Eta Kappa Nu, the international honor society of the Institute of Electrical and Electronics Engineers for the field of Electrical and Computer Engineering. The Eta Kappa Nu Chapter at UNT is hosted by the Department of Electrical Engineering but students in Computer Engineering are welcome to join and become officers. Further details about the chapter and the award are at


Dr. Barrett Bryant presented a poster “VeriCCM: Improving the Syntax and Semantics of Requirements Models” at the Software Engineering Track of SAC 2019, the 34th ACM Symposium on Applied Computing, held in Limassol, Cyprus, April 8-12. This paper was co-authored with Ph. D. student Danielle Gaither (graduated December 2018), Ph. D. student Kaushik Madala, and Dr. Hyunsook Do, and was published in the conference proceedings. Dr. Bryant is also a Steering Committee Member for the conference and co-chairs the Programming Languages Track.
**Dr. Dantu**

Professor Ram Dantu got featured in the North Texas Innovators, "Who Are the Future, Today". Click HERE to view his feature.

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**Dr. Huang**

Dr. Huang received the 2019 Office of Research and Innovation’s Decker Scholar Award, a prestigious award to recognize outstanding research in the natural sciences, computational sciences, or technology at the University of North Texas.

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**Dr. Kavi**

Professor Krishna Kavi have been named UNT Regents Professors for his contributions to research and the university as a whole. A Regents Professorship Award provides recognition to faculty who have performed outstanding teaching, research and service to the profession, and who have achieved a high level of national and international recognition.

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**Dr. Takabi**

Dr. Takabi received the 2019 Office of Research and Innovation’s Early Career Award, one of the prestigious annual Research and Creativity Awards (RCA). This award goes to a UNT faculty member within her/his first 10 year in full-time faculty appointment whose research accomplishments or creative endeavors have been truly outstanding.
“GIT” INFORMED- Did you know?

- UNT ranks #16 among public universities in graduating women in CS.
- A computer as powerful as the human brain would be able to perform about 38 thousand trillion operations per second and hold about 3,584 terabytes of memory.
- U.S. chose 00000000 as the password for its computer controls of nuclear tipped missiles for eight years.
- CAPTCHA is an acronym for “Completely Automated Public Turing test to tell Computers and Humans Apart”

THE EYE- current events

- Graduate Student Orientation - August 20th
- Teaching Assistant/Teaching Fellowship Orientation - August 20th
- First Flight - August 21st
- Faculty and Staff Retreat - August 22nd
EAGLE CALL- upcoming events

In Discovery Park room D201, the UNT Robotics group will meet every other week at 7pm. Further details will be provided at a later date, so keep tuned on your chance to support or join the team.

A “BIT” OF FUN

Humperdink the camel came to join Discovery Park on HUMP day. Pictured from left to right are Shiva Ebrahimi, PhD student, Diana Bergeman, Administrative Coordinator, and Melanie Dewey, Administrative Specialist.
Melanie, Meagan, Diana, and Pruthvi posing for National Friendship Day!

Our awesome, hard-working students celebrating Student Employee Appreciation Week April 8, 2019! We let our students know just how sweet we think they are by feeding them chocolate, donuts, and other goodies through the week. Pictured left to right are Amran Haroon, Utpal Kumar Dey, ABM Rezbaul Islam, Nitin Reddy Chencharapu, Chenchu Sal Krishna Kolli, Ibrahim Olokodana, Brad Aiken, David James, Srikala Murugan.
CONTEST WINNERS

NEW CSE logo

Drawn by Luci Tran and voted on by our student body.

UNT CSE newsletter section name

- CSE Qubits- Rohith Yanambaka Venkata
- Eagle Call- Miranda Apple
- The Eye- Bhuvan Mittal
- GIT Informed- Nicholas Tindle

Congrats to all the winners listed above! Come to F201 after September 1, 2019 for your prize!

PEOPLE’S CHOICE

Senior design day

- Computer Science- ResQpet
- Computer Engineering- Smart Door
- Information Technology- On Task

Please come and visit our hardworking senior’s design projects across from the main office!
conGRADulations

THE tassel WAS WORTH THE Hassle
SUMMER 2019

Ph.D. in Computer Science and Engineering
Maral Azizi
Corina Andreea Floreescu
ABM Rezbaul Islam

Master's in Computer Engineering
Marco Antonio Duarte

Master's in Computer Science
Hazika Theogene Bucuti
Sirisha Dharmavaram
William David James Jr.
Helmar Martens Jr. (EMCS)
Venkata Leela Lakshmi Tejazwini Sure
Logan Widick
Htoo Aung Win
SUMMER 2019

Bachelor of Science in Computer Engineering
Maria Georgina Pavloschi
Tyler Aaron Anderson
Nasser Sabri A. Alqudaaihi
Tony Chan Phonglom
Justin K. Paul

Bachelor of Science in Computer Science
Dania V. Chavez
Latravious D. Mayfield
Alexander James Alfonso
Daniel Ray Javelli
Joshua Tanguma
Michael C. Cooper
Chalet Ciera Shelton
Abigail Rivera
Cole Alexander Bush
Jeremiah Jack Dickens
Preston Cole Mitchell
Tuan Anh Mai
Mason Alexander Hobbs
Sebastian Thomas King

Bachelor of Arts in Information Technology
Ryan Gibeault
Rayneil J. Williams
Breuna S. Riggins
John W. Cunningham
Jason Christopher Waites
Vien Tri Huynh
Peter Dominguez Neal
Thanks to generous donor gifts, the CSE department is able to fund student travel, student organization special projects, department remodeling and overhaul, and put valuable resources into other student centric activities. Please remember that we depend on donations to keep activities and events alive. Many employers offer a donor match, so please encourage your family to consider donating and to check with their employer to see if they match! You can even designate what you want your donation used for!

If you would like to contribute and make a gift contact Diana.Bergeman@unt.edu