

STUDENT FORUM: TOWN HALL STYLE

*Bring your questions! We hope to
fill the hour with conversation.*

College of Engineering and Computer Science

2020 Fall Student Forum

Wednesday, September 16, 2020

1-2pm

Virtual: Zoom



CONTENTS

- College Overview and Updates
- Successes and Kudos
- Student Success Center

COLLEGE HISTORY & OVERVIEW

- Engineering Program established in 1969, offering one Bachelor of Science Degree in Engineering.
- College of Engineering formed in 1974. College of Engineering and Computer Science established in 1977. Discipline-based degrees initially offered beginning in 2003.
- Now 44 years young, the college offers fully-accredited degrees in 8 undergraduate, 3 master's, and a Ph.D. programs. The college also offers 12 graduate certificates.
- Undergraduate and graduate students come to the College of Engineering and Computer Science from 65 Tennessee counties, more than 19 states, and 21 nations.
- Active student chapters representing 15 professional organizations exist.



COLLEGE OF ENGINEERING & COMPUTER SCIENCE

Vision

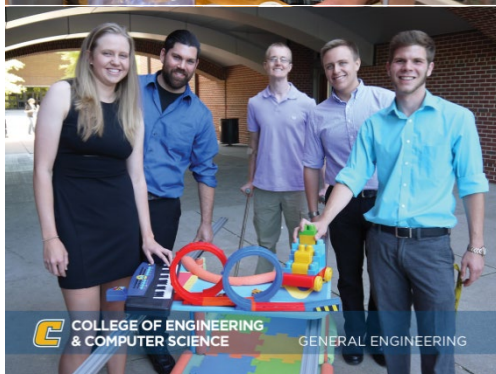
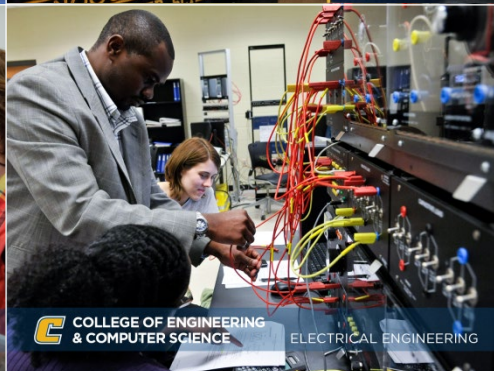
To be a preeminent college of engineering, engineering management, technology, and computer science in education and applied research.

Mission

1. Educate and train future technical & engineering management workforce for Tennessee, the nation, and beyond.
2. Discover new knowledge in engineering, management, technology and computer science.
3. Engage communities through scholarship, service and economic development.

DEPARTMENTS

- Civil and Chemical Engineering
- Computer Science & Engineering
- Electrical Engineering
- Engineering Management & Technology
- Mechanical Engineering



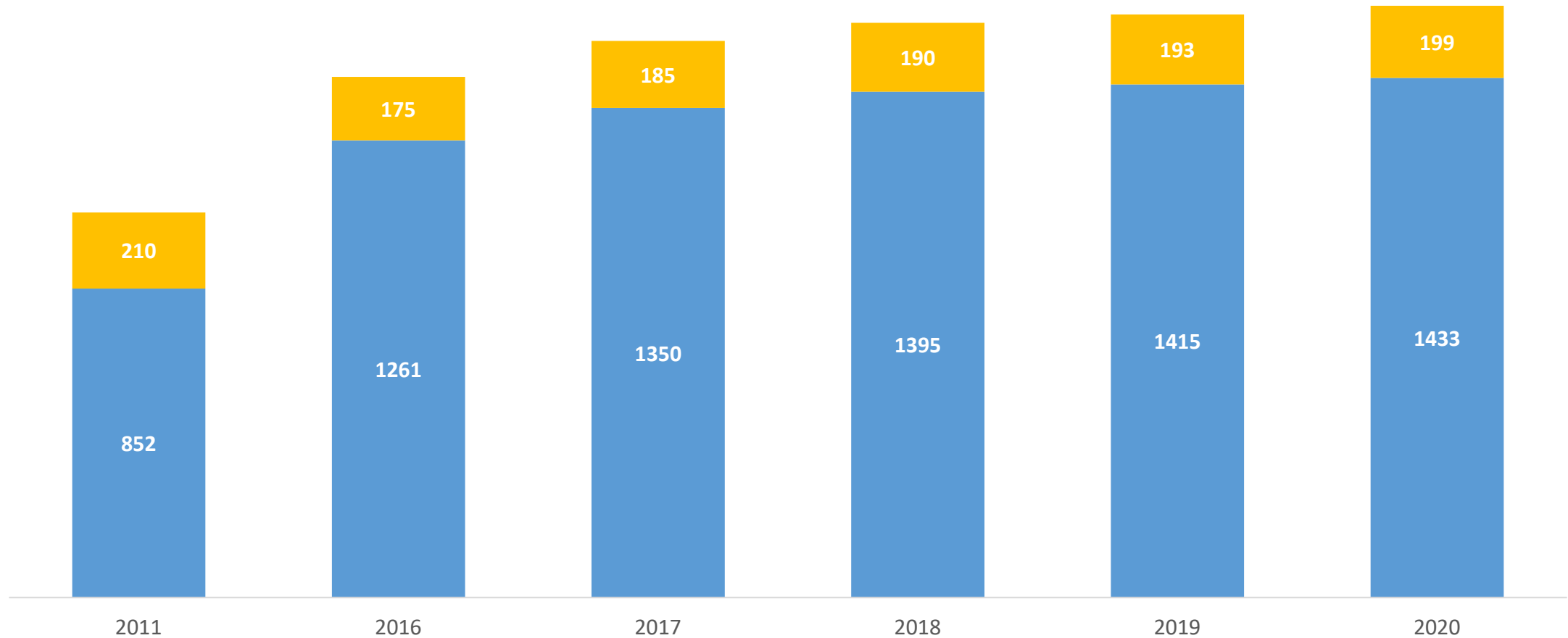
OUR STUDENTS *YOU!*

- Fall 2020 Total Enrollment: **1,632**
- Enrolled Full Time:
 - **90%** of undergraduate students are full time
 - **40%** of graduate students are full time
- Adult Learns (25-years and older)
 - **17%** of undergraduate students
 - **78%** of graduate students
- Nearly **1-in-5** are first generation college students
- **71** CECS students are veterans
- CECS students are **15% female, 85% male**



CECS Enrollment

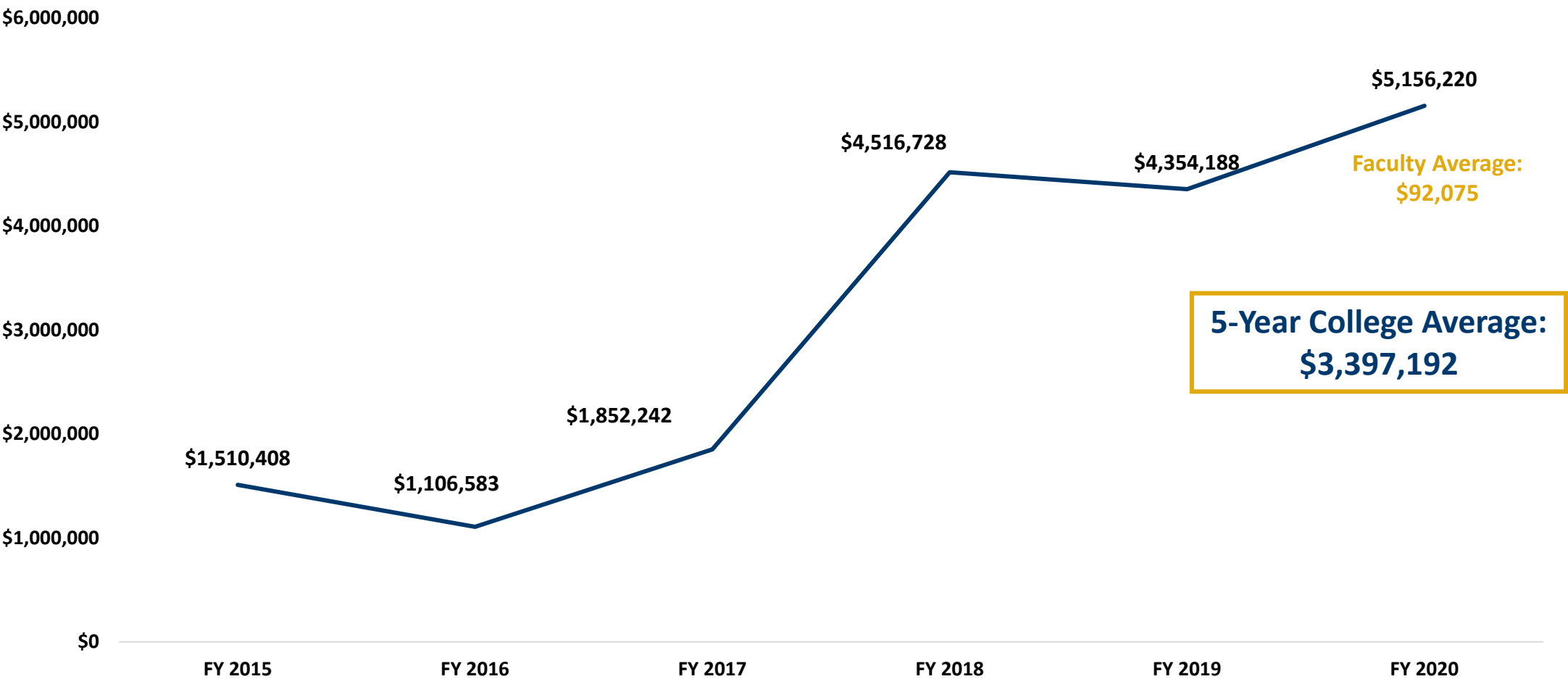
■ Undergrad ■ Graduate





APPLIED RESEARCH PRODUCTIVITY

Total Award Dollars Received



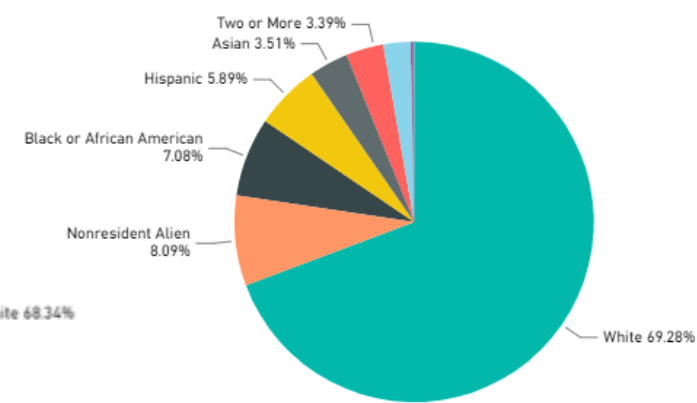
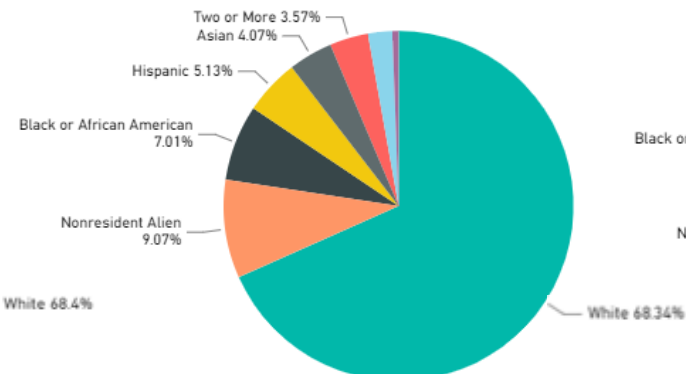
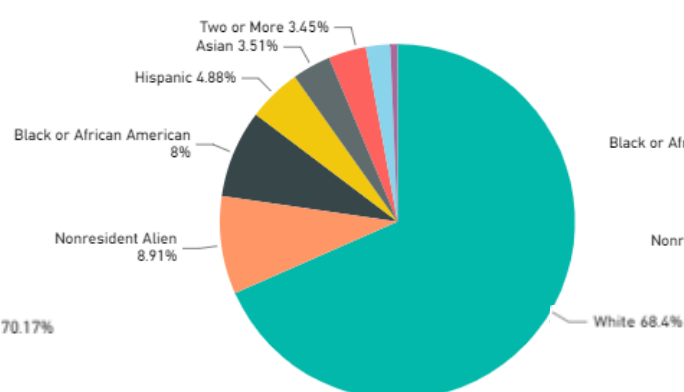
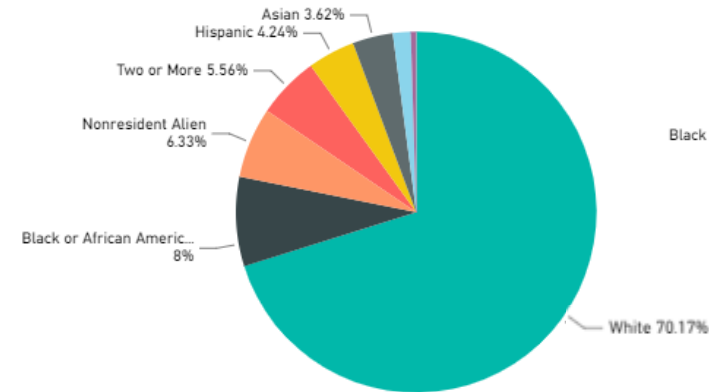
College Demographics

2016

2017

2018

2019



Female: 16%

Veteran: 4.1%

First Generation:
13%

Adult Learner
(Undergrad):
19%

Grad /
Undergrad:
12% / 88%

Female: 15%

Veteran: 3.6%

First Generation:
18%

Adult Learner
(Undergrad):
17%

Grad /
Undergrad:
12% / 88%

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Recent Accomplishments



Record Number of CECS Undergraduate Degrees Awarded in 2019-2020



[Click here for Video Celebrating CECS Graduates](#)

- **293 CECS** students graduated last academic year
- **Increase of 11%** over the past academic year
- **Increase of nearly 78%** more graduates than 2015-2016

CECS on Frontlines to Combat COVID-19

- Dr. Trevor Elliott led UTC efforts to produce 3D printed PPE parts for Tennessee
- Dr. Kaplanoglu led a team of two students in the CoVent-19 competition to design a rapidly deployable mechanical ventilator
- Dr. Menjgun Xie and a student developed the COVID-19 Self-Check software deployed by the university



Self Check

Self Check Survey

Answer the following questions to determine if you should stay at home

Who will receive your survey response? *

Supervisor

What's your body temperature? *

°F/°C

Have you been tested for the coronavirus (awaiting results)? *

☐ Yes ☐ No

Have you tested POSITIVE for the coronavirus? *

☐ Yes ☐ No





UTC CECS Mechanical Engineering Alumnus Chantz Yanagida works closely with HCDE and other community leaders to print and produce respirators.

National, Regional Rankings for MS Engineering Management



- Online master's in engineering management program is ranked **No. 3 in the nation** and as the **best program in the South** by intelligent.com
- Rankings based on cost, course strength, reputation, faculty and flexibility
- UTC scored 95.60; the No. 1 program at the University of Idaho scored 98.46

"Our top picks for the best master's in engineering management are well-regarded, customizable and affordable."

Student Success Stories



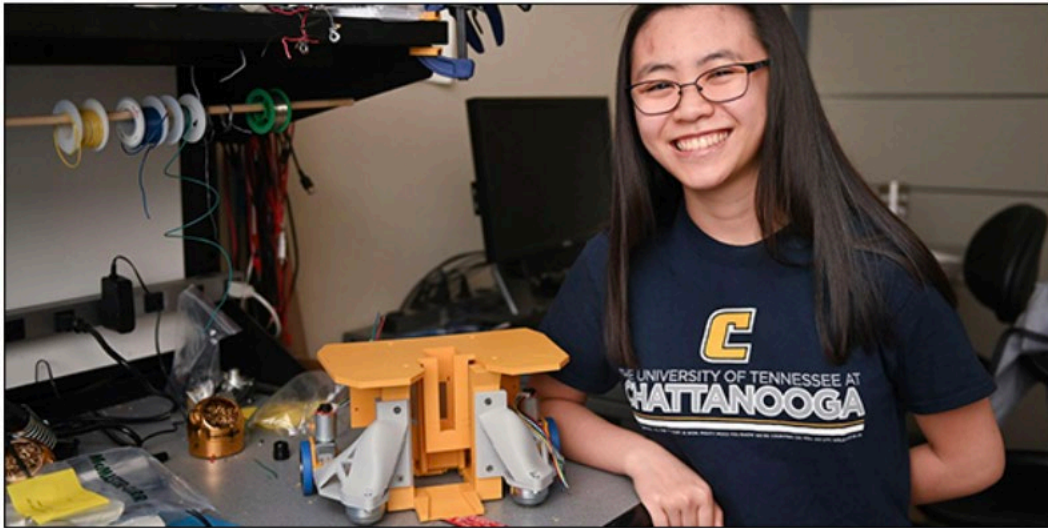
[Click here for video](#)



**Chemical engineering graduate wins prestigious
Goldwater Scholarship**

[Click here for the story](#)

Student Success Stories



Lee family is a triple threat with 3 siblings earning UTC degrees

[Click here for the story](#)



Work by UTC students makes things easier for hospital patients

Erlanger is using electronic kiosks that register patients, and the system is expected save the hospital about \$1.05 million over five years. It's a system three students pitched to Erlanger.

[Click here for the story](#)



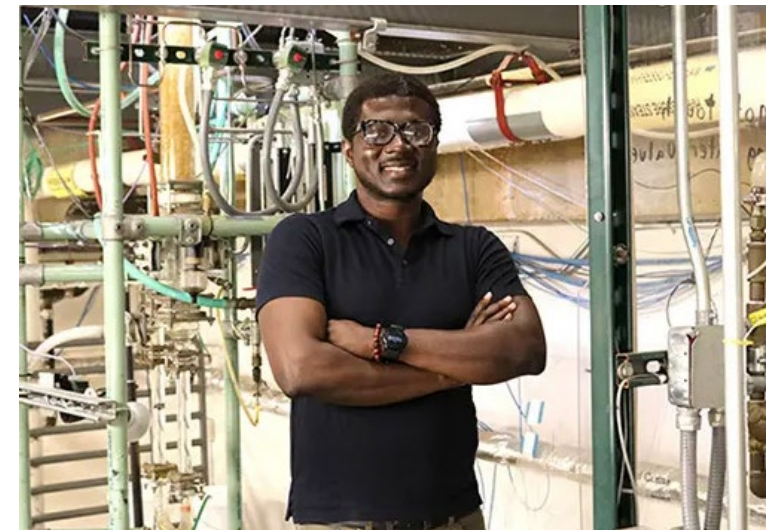
Sinking the putt: Monica San Juan wins at school and sport

To be good at engineering is time-consuming. To be good at golf is time-consuming. To be good at both is, well, rare, and extremely difficult. Monica San Juan did both at UTC.

[Click here for the story](#)

Faculty Accomplishments

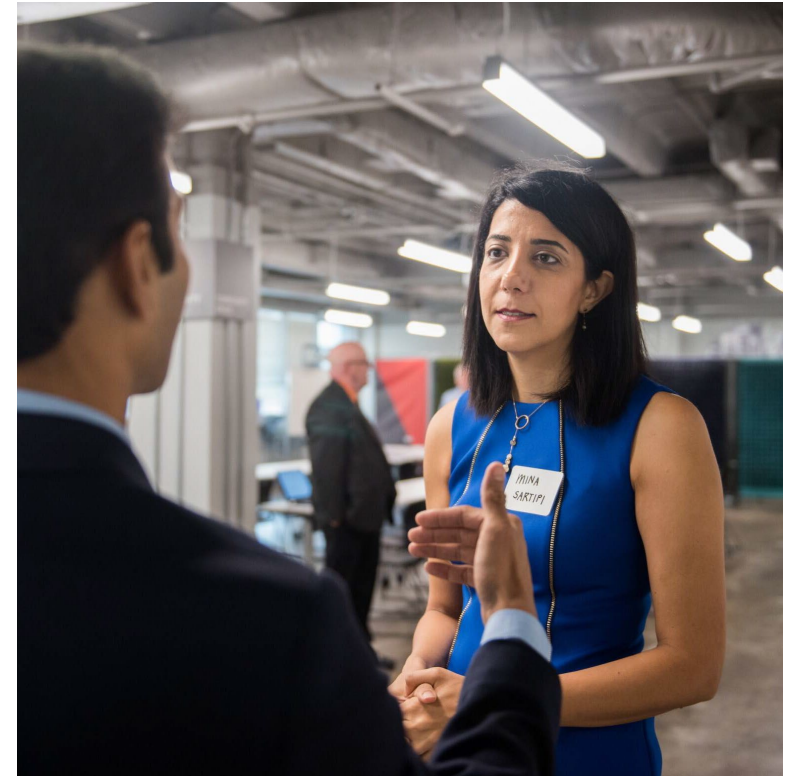
- **Dr. Daniel Loveless** led the effort to have UTC chosen as the Missile Defense Agency's partner institute in the SCALE microelectronics/rad fx consortium
- **Dr. Michael Danquah** was selected as a UC Foundation Professor, a recipient of the Ruth S. Holmberg Grants for Faculty Excellence, and elected to the Royal Society of Chemistry
- **Dr. Mina Sartipi** was selected as a Guerry Professor



Center for Urban Informatics and Progress (CUIP) Wins International Award

- Researchers at UTC are creating a computer model that can predict where traffic accidents will happen
- The project was selected as a winner in the **International Data Corp.'s Smart City North America Awards**
- Chattanooga and Hamilton County were named as the winner in the Police and Law Enforcement category for the "911 Project," spearheaded by UTC's CUIP, a member of the **Chattanooga Smart City Collaborative**

Read the story [here](#)



Dr. Mina Sartipi
CUIP Executive Director
Professor of Computer Science and Engineering



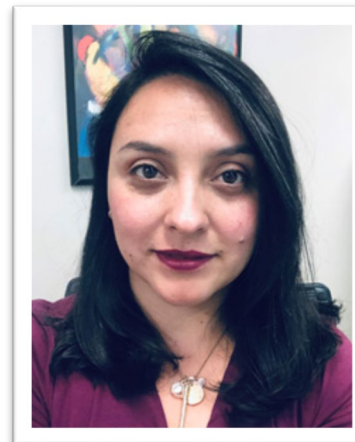
CECS Academic Advisors



Lisa Tarr
Lisa-Tarr@utc.edu
EMCS 344D
423-425-5465



Sarah Alsobrooks
Sarah-Alsobrooks@utc.edu
EMCS 344B
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Carmela Castro
Carmela-Castro@utc.edu
EMCS 344E
423-425-5862



Dana Schmutte
Dana-Schmutte@utc.edu
Location: EMCS 344F
423-425-4309

Peer-to-Peer Tutoring

Lisa Tarr-Staff Mentor

Samantha Sweck -CECS Lead Peer Tutor

[Sign-up for Tutoring](#)

12 Peer Tutors

2 Study Rooms

To schedule a tutor session:

MyMocsNet/Academics Tab/NAVIGATE/
Get Assistance. Then Choose tutoring

OUTREACH



Sara Jackson

Outreach Coordinator

Sara-Jackson@utc.edu

[\(423\) 425-5828](tel:(423)425-5828)

344B EMCS

Student leaders are encouraged to participate in outreach activities. In 2019/2020 academic year, CECS participated in more than 200 recruiting events.



STUDENT AMBASSADORS



Ambassadors are here to help. If you have a question, please ask. Learn more - utc.edu/ambassadors



Developing Professionalism

- Suit Up Event
- Handshake/LinkedIn Workshop
- Backpack 2 Briefcase
- Resume Doctor

College Career Fair: November
and March



Professional Development



Nicole Wake, CECS Career Counselor

EMCS 332

423/425-4730

Schedule an appointment with Nicole through Handshake

- Resume Review
- Job Search Techniques
- Interview Skills
- Dress For Success
- Prep for the Career Fair tips

DID YOU KNOW?
SCHOLARSHIPS
ARE AVAILABLE!

Applications Open in October

Submit one application to be considered for 20+ scholarships
specifically for CECS students

Awards announced in April – at Scholarship Awards Dinner

VISIT: utc.edu/CECS-Scholarships

CECS Residential Learning Community



- Provide students a unique, inclusive residential experience
- Allows students to learn where they live
- Students reside with like-minded peers interested in engineering, technology and computer science
- Students learn character development, maturity and individual growth

HANDSHAKE



Total Employers in Handshake: 8,029

Industries:

- Manufacturing- 775
- Internet Software- 944
- Automotive- 198
- Civil Engineering- 173
- Utilities/Renewable Energy- 173
- Electronic Computer Hardware- 156
- Environmental Science- 211
- Scientific/Technical Consulting- 221
- Aerospace- 110
- Telecommunications- 134
- Construction- 290

 **Handshake**

Find Your Next

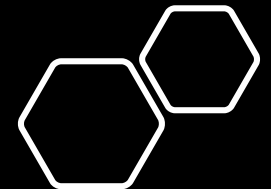
Inspiration
Coffee Chat
Mentor
Internship
Opportunity
Job
Career Path
Mission



Why should I use Handshake?

6,000+ Employers
1400 within CECS focused Industries
Industries:

- Manufacturing – Other (344)
- Internet & Software (362)
- Automotive (77)
- Civil Engineering (76)
- Utilities and Renewable Energy (61)
- Electronic & Computer Hardware (55)
- Environmental Services (73)
- Scientific and Technical Consulting (80)
- Aerospace (16)
- Telecommunications (39)
- Construction (140)
- Electronic and Comp Hardware (55)



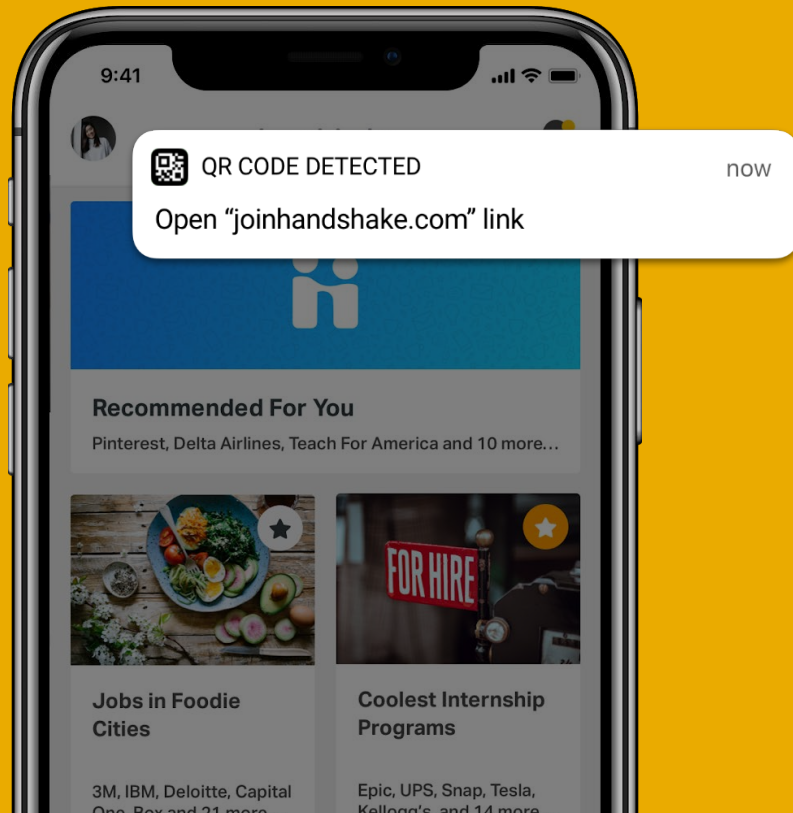
GET STARTED: STEP 1

Log In

Open the camera app to scan QR code,
and tap the notification that pops up.

Alternatively, visit

utc.joinhandshake.com

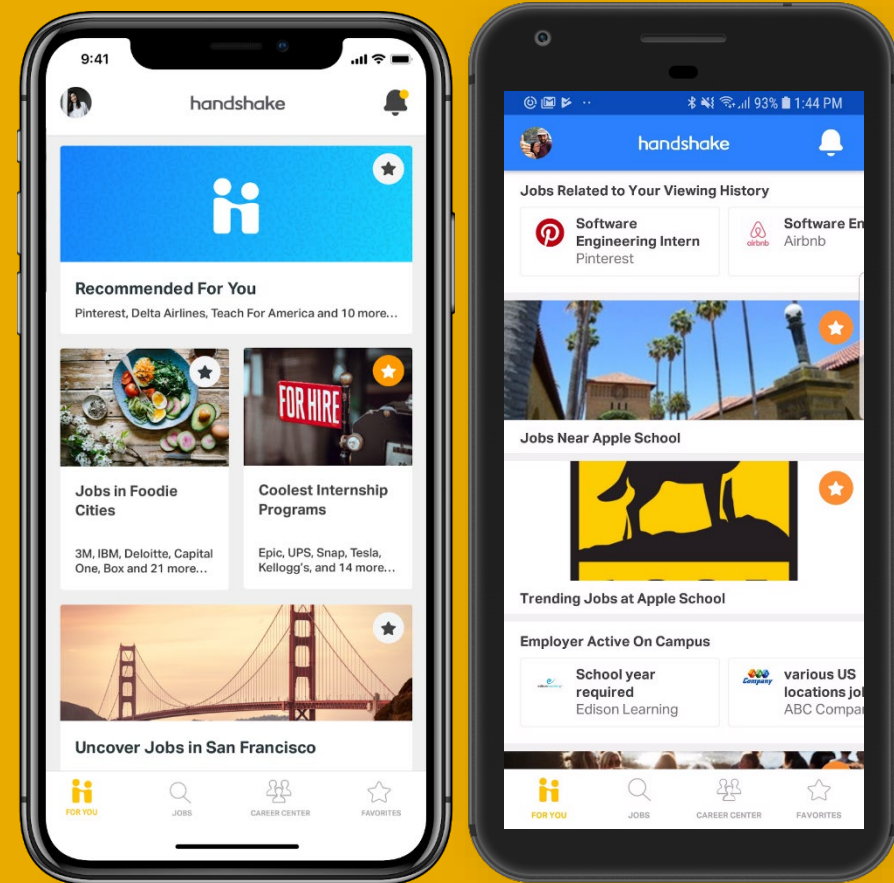


GET STARTED: STEP 2

Download the app

Search for “Handshake” on the App Store or Google Play.

12.4K reviews



GET STARTED: STEP 3

Develop and launch your career.

Find your next.

Log into the Handshake app today and kick off your college-to-career journey.

