



COLLEGE OF  
**ENGINEERING, ARCHITECTURE  
AND TECHNOLOGY**

# CEAT HIGHLIGHTS

April 2021

## Announcements

### CEAT faculty and staff recognized at the 2020 University Awards Convocation



Ed Kirtley



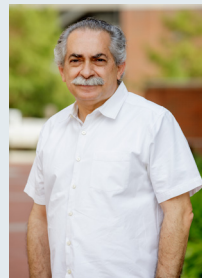
James Stine



Heather Yates



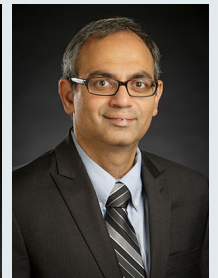
Mary Francis



Moh'd Bilbeisi



Kelvin Wang



Jindal Shah

### OSU ranked top 10 nationally for contributions to United Nations Sustainable Development Goals



### CEAT departments certified as healthy departments



CEAT Dean's office | Gold Tier

### Become a 2021 Watermark Scholar



Division of Engineering Technology  
| Silver Tier



Fire Protection Publications  
| Silver Tier



# Academics

## Jasmine Taplin Awarded the ECE Sigmon Scholarship



## Vaidyanathan named associate editor of International Ceramic Technology



## Senior Design Expo

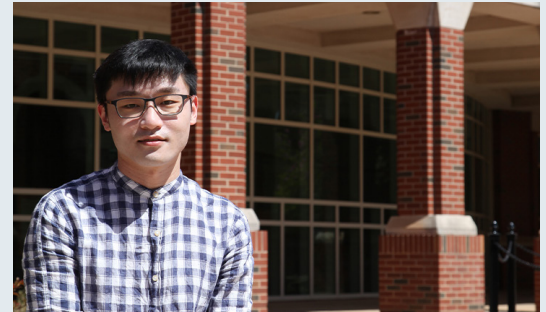
See what our seniors have been working on



## Two CEAT academic advisors recognized by NACADA



## Hao Pan selected to receive Homer and Tang Graduate Fellowship



## Kaitlyn Lane recognized as a Women for OSU Scholar



## Project Boom Podcast



The goal of Project Boom is to break the sound barrier with an unmanned aircraft. Project Boom started with

two students, including one from Oklahoma State University.

Project Boom now has collaborators all over the world. Chief engineer Johnathan Burgess sat down with OStateTV's Malley Jones to talk about the goals and progress of Project Boom...

## Dr. Glenn receives Outstanding Faculty Award in CEAT





# Academics

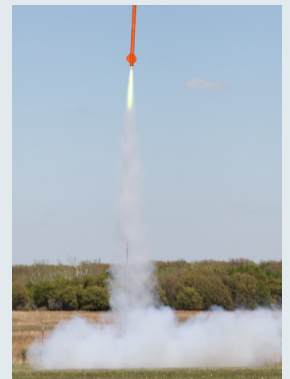
Speedfest 2021 was a huge success this year



Black Team



Orange Team



# Academics

## CEAT recognizes outstanding graduate and senior students

### CEAT Dean's Overall outstanding Graduate Student



### Hope Hall Becker

Hope Hall Becker is a doctoral student in the School of Civil and Environmental Engineering. Hall Becker has worked in Dr. Tyler Ley's research group as a graduate research assistant for the past four years and is considered exceptional. She is hard working, clever, organized, inspiring and a great communicator.

Hall Becker assisted in teaching the undergraduate construction materials class for CIVE, serving as a substitute lecturer for several weeks. She also assisted in the development of a lab manual for the course and ran each of the lab sessions. Additionally, she helped the Oklahoma Department of Transportation training center with the proctoring of and teaching several classes this year when they were short-handed. Hall Becker is considered a leader at the Bert Cooper Lab and is well respected by faculty and staff.

Hall Becker's research has focused on the development of a new testing device that was developed at OSU called the Super Air Meter (SAM). This device is used to measure concrete as it is being placed to ensure that the right bubble size and spacing exist in the fresh concrete for freeze and thaw durability. SAM is now an American Association of State Highway and Transportation Officials' standard and is used in 38 different states and 9 countries. Hall Becker leads a team of graduate and undergraduate students in their testing of the device and she has been an important part of a national training effort with the device in Chicago.

### CEAT Dean's Overall Outstanding Senior Student



### Olivia Long

Olivia Long is a senior student in the School of Electrical and Computer Engineering. Long serves as a mentor through the CEAT Scholars program for three OSU freshmen. She is a perfect example of what great mentoring looks like and as a personable and respectful leader, she has been able to have conversations with her mentees that might have taken years for faculty and staff to have. The CEAT Scholar experience is greatly enhanced by caring and supporting mentors like Long, who was recently recognized for her mentoring contributions by the Oklahoma Foundation for Excellence.

Professors are pleased and impressed with Long's commitment to the classroom. She has been a top tier student, is polite and respectful and asks interesting and inspiring questions. When working with a professor on her Honors College project she treated the project as an avenue to venture beyond the classroom to gain an advanced understanding of practical engineering challenges. Long has made a positive and lasting impression at ECE.

### CEAT Outstanding Graduate Students

- BAE | Maryam Samimi**
- CHE | Amir Erfani**
- CIVE | Hope Hall Becker**
- ECE | Karl Strecker**
- FEMP | Rodney Eksteen**
- IEM | Jackson Baker**
- MAE | Suraj Pawar**
- MSE | Lynsey Baxter**

### CEAT Outstanding Senior Students

- ARCH | Rebecca Dempewolf**
- BAE | Jacob Auer**
- CIVE | Wanying Zheng**
- ECE | Olivia Long**
- EET | Killian Bussey**
- IEM | Matthew Wilkinson**
- MAE | Caleb Bengs**

# Research

## Dr. Austin Buchanan presents his Models for Redistricting to the State Legislature

The Oklahoma State Senate Select Committee on Redistricting held a meeting on Tuesday, April 13 in which the public was invited to attend and submit political district maps. Dr. Buchanan presented his for State Senate and State House.

Dr. Buchanan, Assistant Professor in the School of Industrial Engineering and Management, received an NSF CAREER award titled "Parsimonious Models for Redistricting". His research builds new models and algorithms to develop mathematically sound and transparent political redistricting plans that create a specified number of contiguous districts, each within a specified population range, in a compact manner while preserving subdivisions and communities of interest. Other state-specific or local constraints are also considered.

