

CSE NEWSLETTER: A LOOK INSIDE THE DEPARTMENT

Message from the Chair

Like it has been for so many, this has been a quarter of unprecedented challenges for the UC San Diego CSE department. More than ever, we as a department (along with the Jacobs School of Engineering and UC San Diego) stand with so many others to affirm our unflinching support for and commitment to racial equality – with particular concern for our Black colleagues, community members and friends.



At the same time, I want us all to be introspective, examine our own biases and shortcomings and take proactive steps to develop a completely inclusive environment. For those still searching for things they can do, our [CSE Diversity, Equity, and Inclusion](#) committee has had a huge influence on the department, but needs more help to keep up the good work.

As we close out this academic year, I couldn't possibly be prouder of our faculty, staff and students for their hard work and flexibility during these unprecedented times. It was a daily battle for most to keep up with the constantly changing demands, modalities and regulations. Yet, from my view, the faculty and staff never took their eyes off the (sometimes conflicting) goals of student safety and uncompromised academic and educational excellence.

For the CSE Class of 2020 – you certainly had a unique experience and should be proud. We missed the traditional graduation ceremonies, but we still acknowledge all of your achievements.

This is my last newsletter as department chair. Sorin Lerner will be taking over soon, and I am confident he will take great care of the department. Have a wonderful, healthy and safe summer.

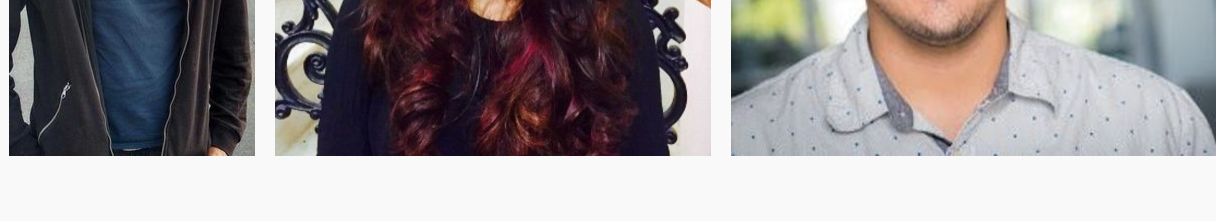
Stay connected over the summer by following our [Twitter](#), [Facebook](#) and [LinkedIn](#) and [Instagram](#) feeds. If you have news to share, story ideas or comments for our CSE Communications Team, please send them to newsworthy@cs.ucsd.edu.

STUDENT ACHIEVEMENT AWARDS

We are so proud of our CSE Class of 2020 for all they have accomplished under challenging circumstances. Special congrats to the following CSE student achievement awardees.

Doctoral Awards for Excellence

Research: **Shravan Narayan**
Teaching: **Joseph Geumlek**
Service and Leadership: **Vignesh Gokul**
Contributions to Diversity: **Aditi Mavalankar**
Contributions to Diversity: **Adrian Salguero**



Masters Awards for Excellence

Research: **Jiacheng Li**
Teaching: **Alexandra Macedo**
Service and Leadership: **Connie Guan**
Contributions to Diversity: **Sophia Krause-Levy**

Honorable Mentions

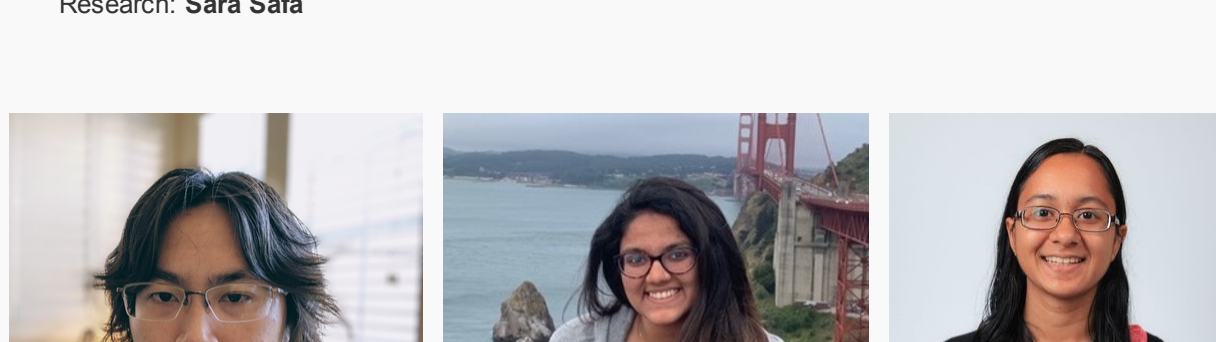
Research: **Prannoy Pilligundla**
Teaching: **Shreeman Hariharan**



Undergraduate Awards for Excellence

Research: **Guangyan Cai**
Teaching: **Sabeel Mansuri**
Teaching: **Nate Brown**
Service and Leadership: **Priyal Suneja**
Contributions to Diversity: **Nidhi Bangari**
CSE Ring Ceremony: **Weiyang Frank Wang**

Honorable Mentions
Leadership and Service: **Madeline Sporkert**
Research: **Kabir Nagrecha**
Research: **Sara Safa**



JOB SEARCH RESOURCES

The job market isn't what it was in February, but people are definitely hiring. Here are a few resources new grads can access to help find their next gig.

- [UC San Diego Career Center](#)
- [Jacobs School of Engineering Alumni](#)
- [Tritons Connect](#)
- [Computer Science and Engineering LinkedIn Group](#)
- [CSE Students & Alumni Facebook Group](#)

CSE NEWS

New Genome Assembler Simplifies Viral Sequencing

Pavel Pevzner and colleagues at UC San Diego and Saint Petersburg State University have developed [a new approach to genome assembly](#) that will help scientists identify novel viruses in complex samples. The technique, called metavirolSPAdes, allows researchers and clinicians to isolate a single viral genome, even when it is mixed with thousands of others viruses and bacteria.

Researchers Win Test of Time Award for Paper that Changed the Auto Industry

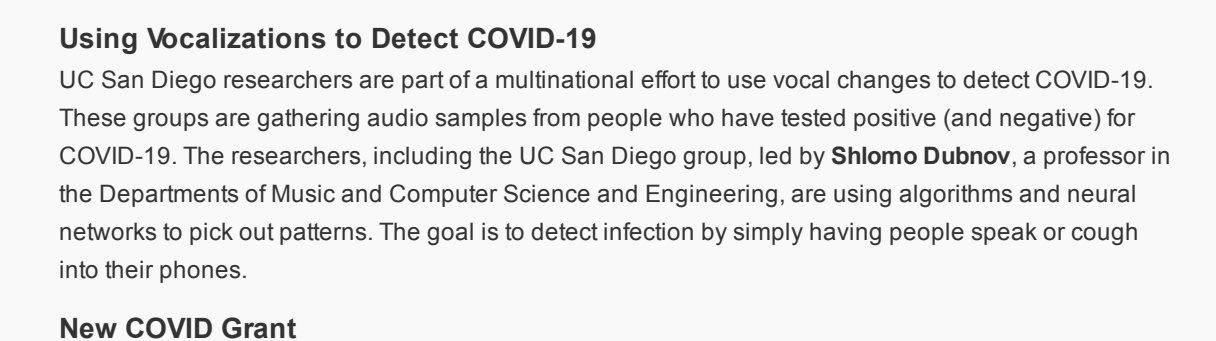
Stefan Savage and colleagues first gave the automotive industry a wake-up call in 2010 when they demonstrated the ability to hack a car's computer system. This work was honored with the [Test of Time Award](#) at this year's IEEE Symposium on Security and Privacy, for its broad and lasting impact.

Extending Our Computer Vision

PhD student Michael Barrow and colleagues have spent years working on ways to use [computer vision](#) to give surgeons better anatomical views to guide minimally invasive procedures. His work was honored at the CSE Winter Research Open House for best industry poster.

New Algorithm Analyzes Genetic Building Blocks of Immunity

Yana Sofonova, Pavel Pevzner and colleagues have developed a [new gene prediction algorithm](#), called MINING-D, which could help researchers investigate the genetics that drive symptom variations in COVID-19 patients. Published in PLOS Computational Biology, these results may illuminate how immune system genes create personalized antibodies against invading pathogens.



Using Vocalizations to Detect COVID-19

UC San Diego researchers are part of a multinational effort to use vocal changes to detect COVID-19. These groups are gathering audio samples from people who have tested positive (and negative) for COVID-19. The researchers, including the UC San Diego group, led by **Shlomo Dubnov**, a professor in the Departments of Music and Computer Science and Engineering, are using algorithms and neural networks to pick out patterns. The goal is to detect infection by simply having people speak or cough into their phones.

New COVID Grant

Pavel Pevzner has received a \$300K NSF grant, through the EARly-concept Grants for Exploratory Research (EAGER) mechanism, to study COVID-19. The project is called: *Assembling the Immunoglobulin Loci Across Mammalian Species and Across the Human Population*.

Researchers Receive Influential Paper Award

ISCA has honored CSE Department Chair **Dean Tullsen**, along with **Rakesh Kumar**, then a PhD student at UC San Diego and first author on the paper, and **Victor Zyuban**, with the [2020 Influential Paper Award](#) for its lasting impact. The paper examines how interconnections can affect power, performance and design.

Alvarado Honored for Outstanding Teaching

The graduating seniors of Warren College have chosen Christine Alvarado, the Jacobs School of Engineering Associate Dean for Students and CSE Teaching Professor, to receive [the 2020 Outstanding Faculty Teaching Award](#), which was presented to her during the virtual graduation ceremony on June 13.

Minnes Receives Distinguished Teaching Award

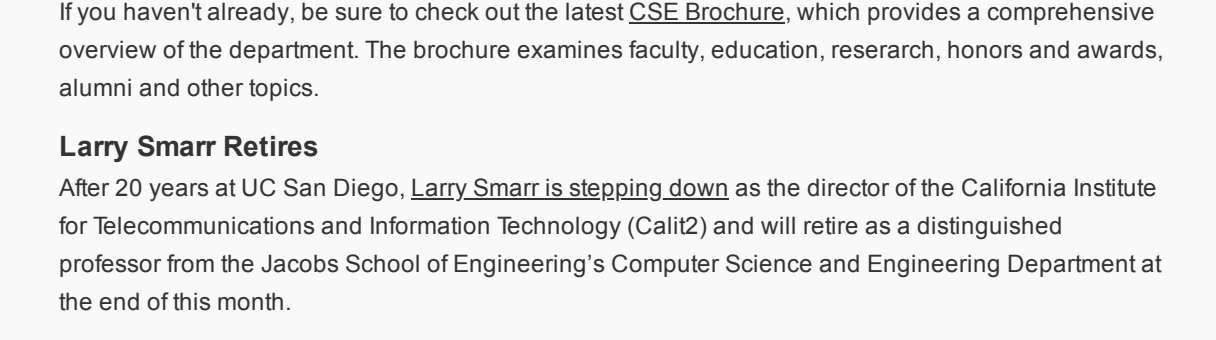
Congratulations to CSE distinguished teaching professor Mia Minnes, who has just been honored with a [Distinguished Teaching Award for Academic Senate Members](#), one of the highest honors for UC San Diego faculty. Minnes is one of five to receive the award, which will be presented next year once gathering is prudent.

Welcome Tzu-Mao Li

Tzu-Mao Li will be joining CSE as an assistant professor. Li is currently a [postdoc at MIT CSAIL](#), studying the connections between visual computing algorithms and modern data-driven methods. Li will be joining the CSE faculty in July 2021.

Call to Code Webinar

As part of Call for Code, IBM and Clinton Global Initiative University invite developers, problem solvers, social innovators and university students to join Visualizing Data and Unity AR/VR in the time of COVID-19 on Thursday, June 11 at 3 pm EDT. Avi Schiffmann, 2020 Weby Awards Person of the Year, and others will discuss building a website with COVID-19 data and how people can leverage existing tools to innovate. The registration deadline is June 10 at 8:59 pm.



The CSE Brochure

If you haven't already, be sure to check out the latest [CSE Brochure](#), which provides a comprehensive overview of the department. The brochure examines faculty, education, research, honors and awards, alumni and other topics.

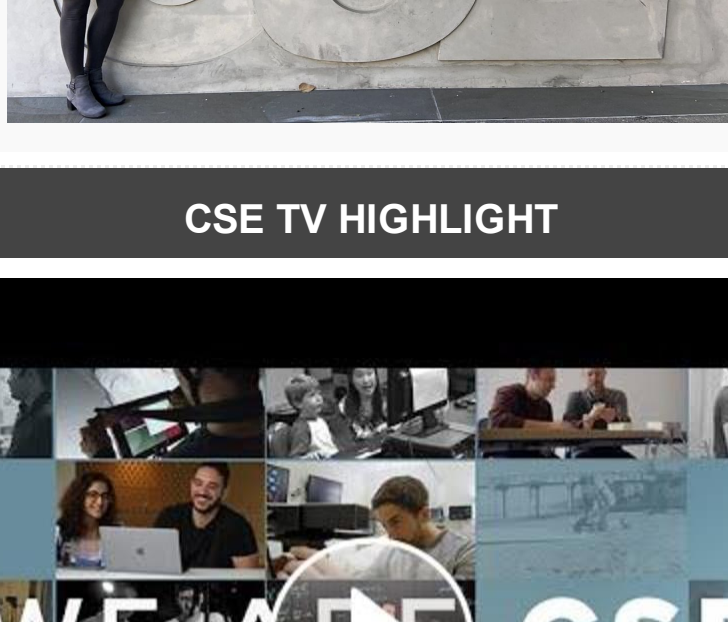
Larry Smarr Retires

After 20 years at UC San Diego, [Larry Smarr is stepping down](#) as the director of the California Institute for Telecommunications and Information Technology (CalIT2) and will retire as a distinguished professor from the Jacobs School of Engineering's Computer Science and Engineering Department at the end of this month.

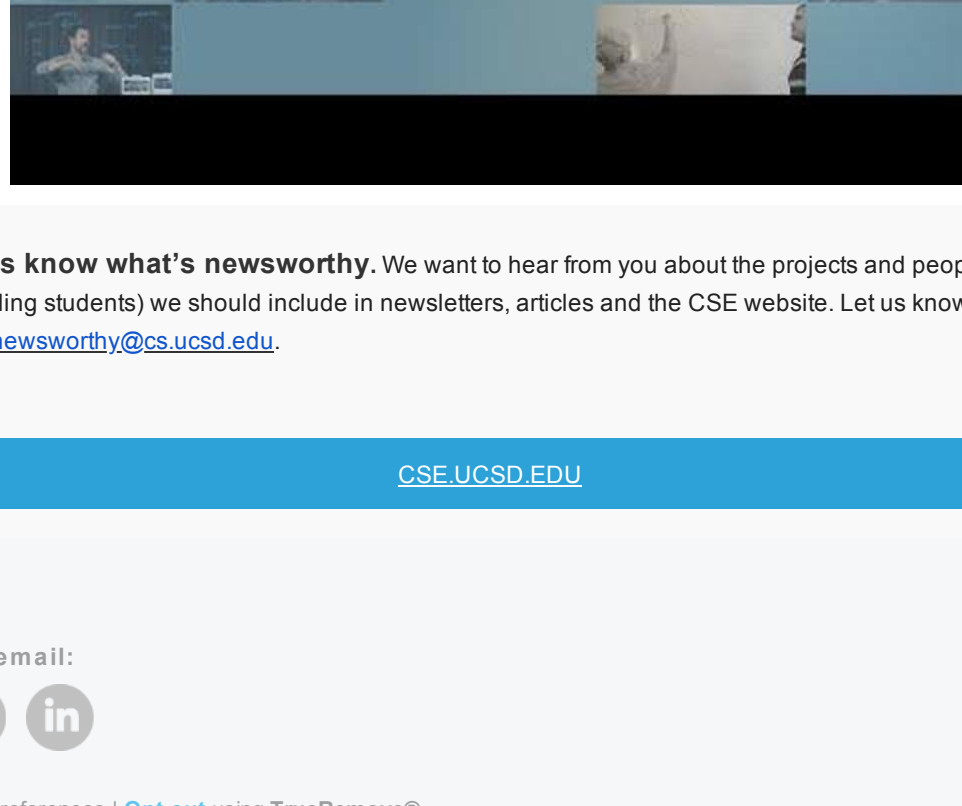
Farewell Becky Hames

After 20 years in higher education, the past three as CSE director of External Relations, Becky Hames will be retiring at the end of June. She has been instrumental in building CSE's fundraising program, recruiting industry partners, meeting with alumni, and helping lead the CSE Research Open House. The cool drone shot in the [We Are CSE](#) video, was based on one of her ideas.

It's a bittersweet moment for Hames, who has enjoyed working with CSE faculty, staff, students and alums, but she is also looking forward to retirement in Arizona and spending more time with her husband and their eight grandchildren. Good luck Becky, we miss you already!



CSE TV HIGHLIGHT



Let us know what's newsworthy. We want to hear from you about the projects and people (including students) we should include in newsletters, articles and the CSE website. Let us know what's up at newsworthy@cs.ucsd.edu.

