

CSE NEWSLETTER: A LOOK INSIDE THE DEPARTMENT

Message from the Chair

One of my proudest moments as CSE chair – and there have been many proud moments – was participating in our Celebration of Diversity earlier this year. Watching our community come together for this important purpose reaffirmed that I am in exactly the right place at the right time. Please read the recent [article](#) in UC San Diego's *This Week* and watch the [video](#) about the event and Red Chair campaign.



I am also quite impressed by the work being done on robotics at CSE. We've had recent successes in healthcare robotics and self-driving vehicles. See more below.

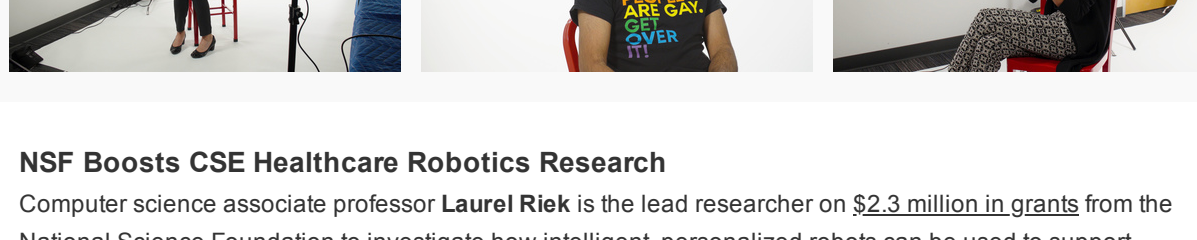
In a few days, we will be going our separate ways, temporarily, for the holidays. I wish everyone a happy, healthy season and look forward to seeing everyone again in 2020.

To get more CSE news, you can follow 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.

NEWS FROM CSE

Stories from the Red Chair

They came in droves to sit in the [Red Chair](#)—graduate students, undergrads, faculty, staff, deans, the chancellor. They came to express their thoughts on diversity—and the results were powerful. A new [video](#) from UCTV captures these raw and emotional moments. Please save the date for the next CSE Celebration of Diversity, which will be held on May 15, 2020.



NSF Boosts CSE Healthcare Robotics Research

Computer science associate professor **Laurel Riek** is the lead researcher on [\\$2.3 million in grants](#) from the National Science Foundation to investigate how intelligent, personalized robots can be used to support neurorehabilitation for adults with mild cognitive impairment and those recuperating from stroke.

Self-Driving Mail Delivery

Two self-driving vehicles have been delivering mail to [Warren and Sixth College](#) since September. The project is a collaboration between the [Contextual Robotics Institute](#) and Integrated Procure-to-Pay Solutions at the UC San Diego. It's part of a broader effort to use the campus as a living laboratory for new technologies.

AI Personalizing Recipes

[Research](#) from the **Julian McAuley** lab could eventually help people generate personalized recipes – on their computers. The study breaks new ground in natural language processing, which studies how computers understand and generate human (natural) language.

New Record for Encryption Key Cracking

An international research team, including CSE associate professor **Nadia Heninger**, [set a new record](#) for cracking encryption keys. The team factored the largest key yet, a 795-bit integer, and computed a discrete logarithm of a 795-bit integer. The project took around 35 million hours of computation time. These key sizes are not typically used in current cryptographic applications. However, these efforts are important to update cryptographic security and key size recommendations.

Standing Up for Our Dreamers

On November 6, the [CSE Diversity, Equity and Inclusion Committee](#) hosted a Deferred Action for Childhood Arrivals (DACA) event to support the [UC Stands with DACA recipients Campaign](#). The event set up two tables in the CSE building to provide information about DACA for dreamers and non-dreamers alike. Participants were also asked to complete the sentence: *I stand with DACA recipients because...*



NOTEWORTHY

PhD students **Angelique Taylor** and **Alyssa Kubota**, former postdoc **Hee Rin Lee**, now assistant professor at Michigan State University, and PI **Laurel Riek** received a [best paper honorable mention](#) at the ACM Conference on Computer Supported Collaborative Work (CSCW) for [Coordinating Clinical Teams: Using Robots to Empower Nurses to Stop the Line](#).

Angelique Taylor and **Alexander Gamero-Garrido** have received [2019 Microsoft Research Dissertation Grants](#) for their respective work. Gamero-Garrido will be studying international internet traffic disruption, while Taylor will investigate ways to help robots work more effectively with people. The grants provide up to \$25,000. In addition, recipients could attend Microsoft's Ph.D. Summit at Microsoft Research headquarters in Redmond, Washington.



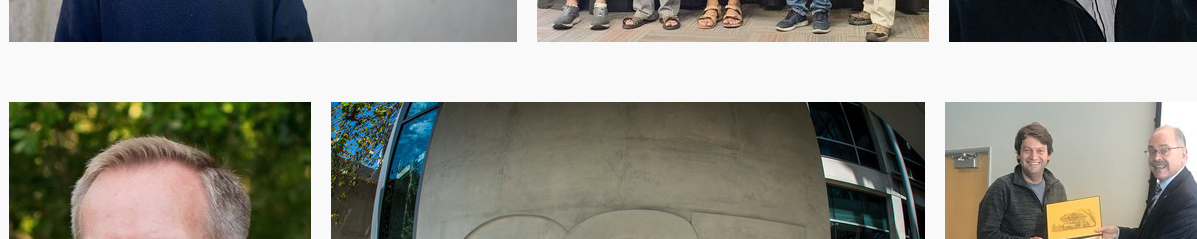
The 2019 Association for Computing Machinery's (ACM) Conference on Computer and Communications Security (CCS) conference gave a "Test of Time" award for the 2009 paper: [Hey, You, Get Off of My Cloud: Exploring Information Leakage in Third-Party Compute Clouds](#) by **Stefan Savage, Hovav Shacham, Eran Tromer and Tom Ristenpart**.

CSE teams did quite well at the [International Collegiate Programming Contest \(ICPC\)](#) Regional Competition in November. All four groups did well and team UCSD J – **Nalin Bhardwaj, Mohit Gurumukhani and Maxwell Morehead** – won third place, advancing to the North American Qualifier Tournament in February in Atlanta.

Assistant professor **Manmohan Chandraker's** group has received a [Google Research Award](#) to work on augmented reality. They will receive \$70,000 to turn mobile phones into augmented reality devices by allowing photorealistic geometry and material and lighting editing in a single input image.

Professor **Alex Snoeren** has been voted an [IEEE Fellow](#) for his contributions to networked systems management and security. IEEE fellowships honor computer scientists for extraordinary accomplishments in the field.

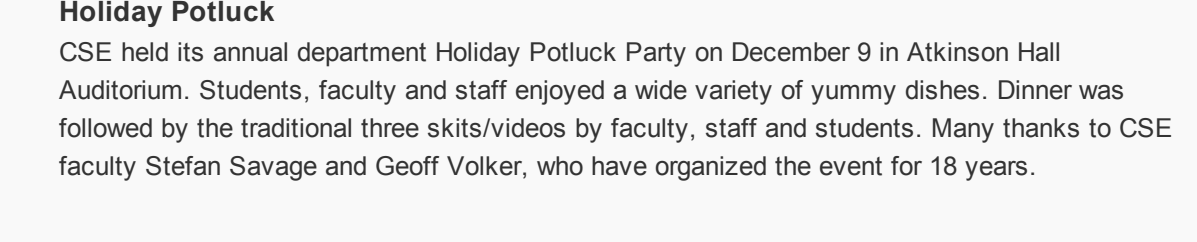
Professor and CSE Vice Chair for Graduate Affairs **Sorin Lerner** has been honored as CSE Teacher of the Year. The award was presented by JSOE Dean **AI Pisano**. In addition to teaching CSE 8A, 130, 230, 231 and 291, Lerner is a tireless CSE supporter, helping organize the CSE Research Open House, Celebration of Diversity and other events.



COMMUNITY IN ACTION

Holiday Potluck

CSE held its annual department Holiday Potluck Party on December 9 in Atkinson Hall Auditorium. Students, faculty and staff enjoyed a wide variety of yummy dishes. Dinner was followed by the traditional three skits/videos by faculty, staff and students. Many thanks to CSE faculty **Stefan Savage** and **Geoff Volker**, who have organized the event for 18 years.



CENTER FOR NETWORKED SYSTEMS

Alan Turing Memorial Scholarship

Giselle Mejia and another student (who has opted to remain anonymous) have been honored with 2019 Alan Turing Memorial Scholarships. The award is named for the legendary codebreaker and computer scientist and honors students for their academic commitment, particularly in networked systems, and ongoing support for the LGBTQ community. Mejia is a fourth-year student studying cognitive science, with a specialization in design and interaction.



CSE IN THE NEWS

[San Diego Union Tribune: UC San Diego using driver-less vehicles to deliver mail in step toward ferrying people](#)

UC San Diego has begun using driverless vehicles to deliver the mail to two of its six residential colleges, an experiment that's expected to lead to ferrying large numbers of people around the huge, crowded campus.

"We're examining how you use autonomous vehicles in an urban environment where you find pedestrians, bicycles and other types of traffic," said Henrik Christensen, director of CRI. "The campus has about 65,000 students, faculty and workers, so this is a perfect place to test the technology."



CSE TV HIGHLIGHT



SAVE THE DATE

CSE 167, Computer Graphics, Final Project Presentations - **December 12**

[CSE Open House](#) - **January 31, 2020**

[CSE Celebration of Diversity](#) - **May 15, 2020**

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.

