COMPUTER SCIENCE & ENGINEERING

UC San Diego

Message from the Chair

As we look back at 2022 in the rearview mirror, I am still excited about the many CSE achievements from the past year – a new NSF-funded $10M center to explore the foundations of data science; groundbreaking research into the causes of cancer; research that assembled the first complete genome; and national and international recognition for our faculty and students, including, among others, seven Test of Time awards, several new ACM Fellows, and PhD fellowships from Meta, Google, Adobe and the NSF. I invite you to learn more about our past year's achievements in our Annual Report.

Sorin Lerner

The beginning of 2023 brings yet more exciting news. CSE's Tajana Simunic-Rosing and collaborators are leading a new $50.5M center funded by the Semiconductor Research Corporation. And this spring, on April 14, we will come together and celebrate our department's 35th anniversary. This will be a time to reflect on our history and think big as we imagine the future of CSE. We have a confirmed speaker for the 35th anniversary celebration: Amin Vahdat, who was previously a professor in CSE and is now Vice President and General Manager at Google.

As we get close to our 35th, here is my recommendation: think of your favorite memory from your time in CSE and share it with someone. Until next time, stay engaged, stay connected, and keep in touch!

Sorin Lerner, CSE Department Chair

Stay connected with CSE by following our Twitter, Facebook, LinkedIn and Instagram feeds. If you have news, story ideas or comments for our CSE Communications Team, please send them to cse-communications@eng.ucsd.edu.

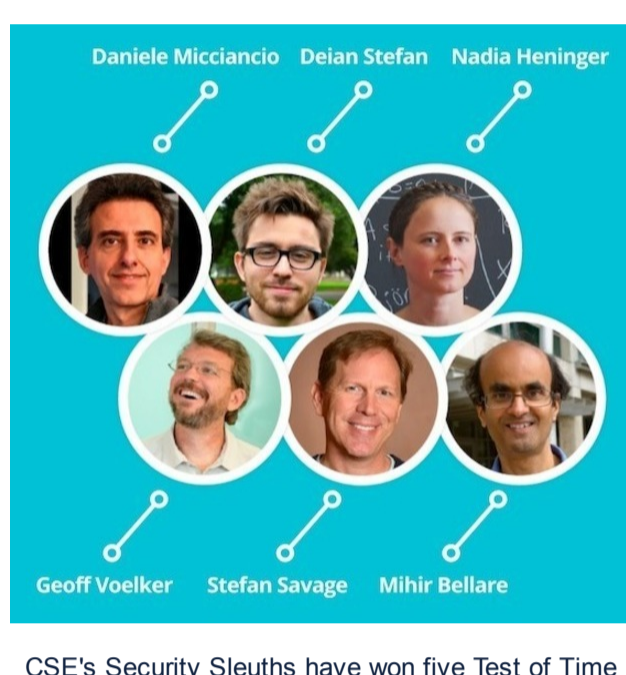## CATCH THE 2020-2021 ANNUAL REPORT

2020-2021 ANNUAL REPORT

Research Highlights + Faculty Awards and Honors + Student and Alumni Recognition

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CSE NEWS

Professor Tajana Simunic-Rosing is leading the new PRISM center.

Daniela Micciancio   Deian Stefan   Nadia Heninger
Geoff Voelker   Stefan Savage   Mihir Bellare

CSE's Security Sleuths have won five Test of Time awards this year.

UC San Diego Leads $50.5M Center for Computing
Researchers led by CSE's Tajana Simunic-Rosing are establishing a $50.5 million Processing with Intelligent Storage and Memory center, or PRISM, to make computing orders of magnitude faster and more efficient. Read More

Security Sleuths: UC San Diego Computer Scientists' Solutions to Security Issues Withstand the Test
Five Test of Time awards from leading computer science organizations were bestowed last year to UC San Diego researchers and their teams for leaving a lasting impact in security and cryptography. Read More

New CSE Faculty Member Amy Ousterhout Races Ahead
It's been said that slow and steady wins the race. But high performers like Amy Ousterhout, a new assistant professor in UC San Diego's CSE department, set a pace few can match – whether she's navigating the fast-track in academia or a high-speed bike race on the weekend. Read More

New Web Tracking Technique is Bypassing Privacy Protections
Advertisers and web trackers have been able to aggregate users' information across websites for decades. First there were third-party cookies; then came user ID (UID) smuggling. Researchers at UC San Diego have developed a measurement tool called CrumbCruncher to quantify the frequency of UID smuggling. Read More

Vice President Kamala Harris Honors CSE Student Naba Rizvi (PhD '25)
Vice President Kamala Harris sent a personal note of congratulations to Naba Rizvi, a PhD student in UC San Diego's CSE department, for her recent recognition by CSEdWeek as a Computer Science Hero. Read More
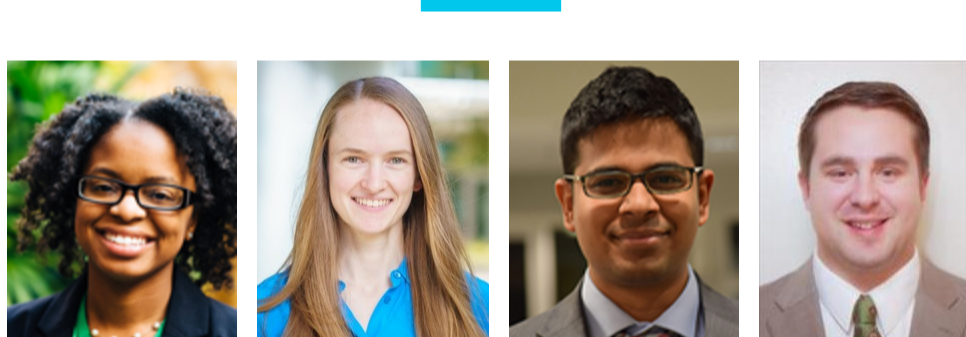

NOTEWORTHY

Audrey Randall and her co-authors won the Best Student Paper award at the 2022 APWG eCrime Symposium for their work examining the issues around malware use of blockchain naming systems.

Professor **Sorin Lerner** and Associate Professor **Deian Stefan**, along with a team of university and industry researchers, were recognized with the 2022 IEEE Cybersecurity Award for Practice for their work on WebAssembly Sandboxing for Firefox.

Two CSE undergraduate students – **David Cao** and **Elizaveta Pertseva** – were selected as finalists for the Computing Research Association's (CRA) 2023 Outstanding Undergraduate Researcher Award.

CENTER FOR NETWORKED SYSTEMS

Imani Munyaka   Amy Ousterhout   Earlence Fernandes   Christian Darneff

CNS Grows Stronger by Four
UC San Diego's Center for Networked Systems (CNS) is adding four additional faculty members to its growing ranks. CSE Assistant Professors Imani Munyaka, Amy Ousterhout and Earlence Fernandes will be supporting CNS research endeavors, along with Christian Darneff, MD, an assistant professor with the UC San Diego Department of Emergency Medicine.

"The mission of CNS is to connect the world-leading research of our faculty with our industrial partners who are facing real-world problems in these areas. With the addition of Amy, Christian, Earlence and Imani we are growing the depth and breadth of our research portfolio to include system resource scheduling and critical security problems in health care, IoT, machine learning and usability," said CNS co-director Stefan Savage.

"As CNS continues to grow, we are excited about the new opportunities this growth brings," added co-director George Porter.

CNS is a research center that utilizes new techniques, evaluations, methodologies, and technologies to address emerging problems in modern computing and data processing infrastructure before they become critical.

CSE COMMUNITY & EVENTS

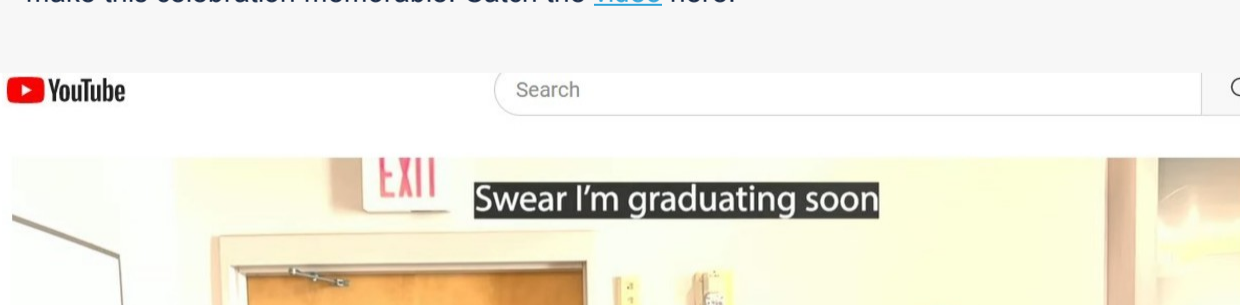CSE staff made a difference in the community, sorting food for Feeding San Diego.

80 gifts, donated by CSE faculty and staff, will comfort foster children through Voices for Children.

CSE Teams Up with Feeding San Diego
Organized by the CSE Staff Social Committee, an enthusiastic group of CSE staff and volunteers participated in a food sorting shift with Feeding San Diego. Local businesses and organizations team up with Feeding San Diego to make a positive impact in the community, serving over 35 million meals annually to children, families, college students, veterans and other underserved populations.

Winter Toy Drive Benefits Voices for Children
For the past month, fluffy stuffed animals and freshly minted children's books have been piling up in CSE 2218. An impressive total of 80 gifts were collected. Soon, each one will find a home with a local foster child. Thanks to generous CSE faculty and staff and dedicated volunteers at Voices for Children, donations will be added to care packages and handed out in courtrooms to comfort children. Founded in 1980, Voices for Children provides volunteer Court Appointed Special Advocates to represent foster children in court, school and the community.

CSE Annual Holiday Party and Skit Show
Shortly before Winter break, the CSE Annual Holiday Party and Skit Show returned to Atkinson Hall. The beloved twenty-year tradition continued with humor, puns and insider jokes – thanks to the efforts of Geoffrey Voelker, who has led this event since it began. Students and faculty enjoyed cookies while previewing hilarious skits written, produced and performed by our amazing faculty, students and staff. A huge Thank You to Geoff and everyone else who helped make this celebration memorable. Catch the video here.

swear I'm graduating soon

LIVE - CSE Holiday Celebration

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 News section. Let us know what's up at cse-communications@eng.ucsd.edu.

CSE.UCSD.EDU