## COMPUTER SCIENCE & ENGINEERING

# UC San Diego

Message from the Chair

Hello everyone. On Jan 31, UC San Diego resumed inperson instruction, and we are all excited to come back to campus. As the quarter gets into full swing, we have many upcoming events, including: • A distinguished (hybrid) talk by Nicki Washington

- on February 7; • The CSE Career Fair on February 9;
  - CSE Graduate Student Visit Day, March 10-11;
  - CSE Research Open House on March 30.
- We recently posted two Twitch live streams with CSE Alum and content creator Mayuko (See below) and PhD



student Ariana Mirian. You can watch all our live streams at the <a href="CSE YouTube channel">CSE YouTube channel</a>. Thank you all for your continued efforts. As we continue to work on our collective sense of community, let's keep pushing forward.

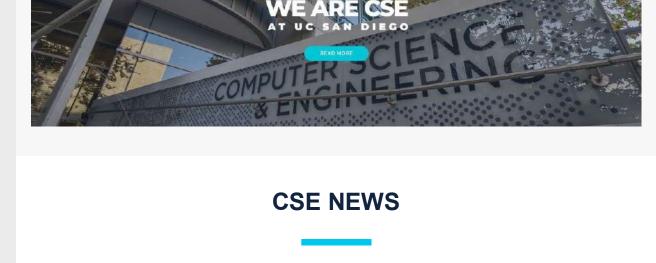
Sorin Lerner, CSE Department Chair

Stay connected with CSE by following our <u>Twitter</u>, <u>Facebook</u>, <u>Linkedin</u> and

Communications Team, please send them to <a href="mailto:cse-communications@eng.ucsd.edu">cse-communications@eng.ucsd.edu</a>.

Instagram feeds. If you have news, story ideas or comments for our CSE

**CSE ANNUAL REPORT** 



## Ranjit Jhala and Tajana Šimunić Rosing have been named Association for Computer Machinery (ACM) Fellows. Jhala was honored for his contributions to software verification and Rosing for her work on power,

## Long-Reads and Powerful Algorithms Identify "Invisible" Microbes In a study published in Nature Biotechnology, an international research team, including Pavel Pevzner,

2021 ACM Fellows

thermal and reliability management.

has shown that highly accurate, long-read genomic sequencing technology can reveal previously hidden microbes, providing new insights into complex biological samples. \$14M NIH Grant Funds Microbiome and Metagenomics Center The National Institutes of Health has made a \$14 million grant to establish a Microbiome and

Metagenomics Center at UC San Diego, part of a nationwide effort to predict individual responses to food

## and inform personalized nutrition recommendations. **Inventing Improvisational Al**

concerns. The work was presented at last year's Internet Measurement Conference.

work onmachine learning, data visualization and other data- intensive tools.

Advanced Grant. Dubnov and Assayag will be working on Project REACH: Raising Co-creativity in Cyber-Human Musicianship, which is teaching computers how to improvise, musically. New Research Reveals How Routers Intercept Internet Traffic

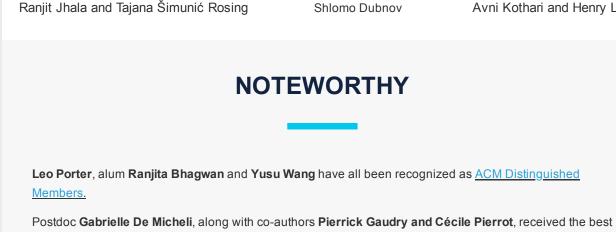
A CSE research team, including Geoffrey M. Voelker, Stefan Savage, Aaron Schulman and Audrey Randall, has shown that Domain Name Specific (DNS) traffic can be intercepted, generating privacy

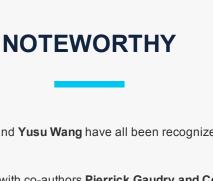
Platform, which offers new opportunities for professors and students who require more bandwidth for their

Shlomo Dubnov and Gérard Assayag, a researcher at the Institute for Research and Coordination in Acoustics/Music in Paris, recently received a €2.4 million (around \$2.8 million) European Research Council

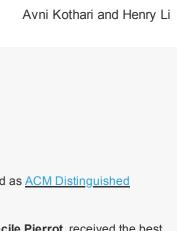
### A New Educational Computing Platform Larry Smarr and others have recently launched the UC San Diego Data Science/Machine Learning

**New DeepMind Fellows Announced** Congratulations to Avni Kothari and Henry Li, CSE's two newest DeepMind Fellows. Made possible by a generous gift from DeepMind, these fellowships support machine learning students from cultural, racial, linguistic, geographic and socioeconomic backgrounds and genders that are underrepresented in ML graduate education.





Shlomo Dubnov



Computation. Researcher Award for 2022. Ana Selvaraj received an honorable mention.

Jessica Lam is a finalist for the Computing Research Association's (CRA's) Outstanding Undergraduate

Gatuam Akiwate has won the Applied Networking Research Prize for Risky BIZness: Risks Derived from Registrar Name Management. This is the second consecutive CSE win: Audrey Randall won last year for Trufflehunter: Cache Snooping Rare Domains at Large Public DNS Resolvers.

Stefan Savage has received a Diamond Award from the University of Washington School of Engineering,

Algorithmic Toolbox, a series of online Coursera classes taught by Daniel Kane, Alexander Kulikov, Pavel

The National Security Agency recently announced its Best Scientific Cybersecurity Research Paper. Shravan Narayan, Craig Disselhoen, Tal Garfinkel, Nathan Froyd, Sorin Lerner Hovav Shacham and Deian Stefan received an honorable mention for Retrofitting Fine Grain Isolation in the Firefox Renderer.

Phd student Mary Anne Smart has become one of seven Jacobs School Racial Equity Fellows, who act as

paper award at Asiacrypt 2021 for Lattice Enumeration for Tower NFS: a 521-bit Discrete Logarithm

student advocates on the Student and Faculty Racial Equity Task Force.

which honors outstanding alumni for their contributions to the field.

Pevzner and Neil Rhodes, is one of the top 250 most popular online courses across all disciplines. Three other courses from UCSD made the list, including Learning How to Learn, taught by Terry Sejnowski and Barbara Oakley; Python for Data Science, taught by Ilkay Altintas and Leo Porter; and Introduction to Big Data, taught by Natasha Balac.

**WE ARE CSE** 

CENTER FOR NETWORKED SYSTEMS

PRESENTS

MEMORIAL

APPLICATIONS DUE

MARCH 2, 2022

**SCHOLARSHIPS** 

One year award up \$12,000

Jessica Lam



**NIYA SHAO** Undergrad CS Major

Gabrielle De Micheli

**Turing Scholarship Deadline** Applications for the Alan Turing Memorial Scholarships are due by March 2. The scholarship is for enrolled UC San Diego undergraduates who actively support the LGBTQIA+ community and major in computer science, computer engineering, public policy, communications or other programs that touch on networked systems.



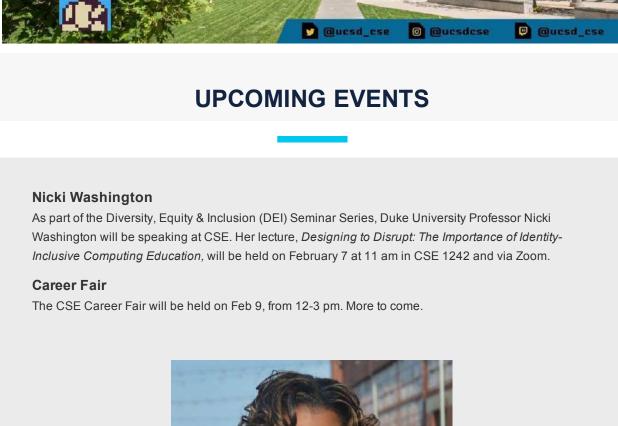
Mary Anne Smart

THE CENTER FOR NETWORKED SYSTEMS **ALAN TURING** 

**CSE VIDEO HIGHLIGHT** 

In our latest Twitch live stream, Chair Sorin Lerner chats with CSE alum and content creator

UCSD COMPUTER SCIENCE & ENGINEERING



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

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