



# CSE NEWSLETTER: A LOOK INSIDE THE DEPARTMENT

# Message from the Chair From developing drone technology to catching credit

card thieves to measuring ocean parameters with surfboard fins, CSE faculty and student research is shaping the world. We recently put together a department fact sheet to highlight some of this research. And the work doesn't stop. Ongoing research is

uncovering hidden biases in healthcare, advancing self-driving vehicles and exploring many other areas. For more news, in real time, you can follow our Twitter, Facebook, LinkedIn and Instagram feeds. If you have news, story ideas or comments to share with our CSE Communications Team, please send them



to newsworthy@cs.ucsd.edu.

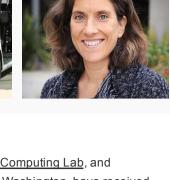
**NEWS FROM CSE** 



develop methods to help rectify them.

Embrace, Empower, Elevate





# Self-Driving Carts Deliver Mail to Warren and Sixth Colleges

In collaboration with fleet services, logistics, the mailing center and the police department, the <u>Autonomous</u> Vehicle Laboratory (AVL) has deployed two self-driving vehicles to support research and mail delivery. Last summer, AVL vehicles delivered mail to Warren and Sixth colleges. Many routes were quite challenging, testing pedestrian/vehicle interactions in unstructured environments under constant construction.

CSE Teaching Professor and JSOE Associate Dean for Students Christine Alvarado received an \$18,000 Google Grant to provide undergraduate research opportunities for women studying computer science at area

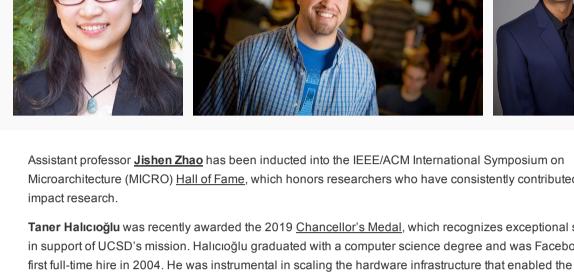
### community colleges. Alvarado and colleagues believe this extra support will help more women make the transition to UC San Diego and other four-year colleges.

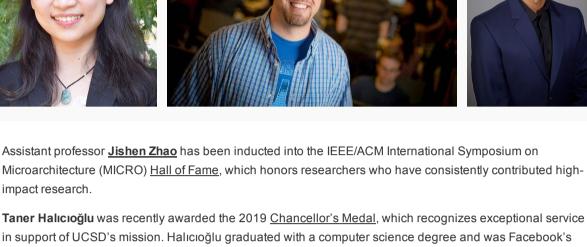
Google ExploreCSR Grant Offers Undergraduate Research Opportunities

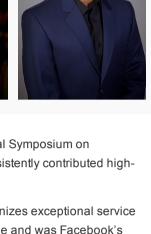
initiatives: We embrace people from all identities, including but not limited to people with different backgrounds, ethnicities, genders, and sexual orientations...In addition, CSE has created a <u>Diversity Fund</u>. All donations will support increased diversity throughout CSE.

CSE's Diversity, Equity and Inclusion Committee has developed a vision statement to inform all future

NOTEWORTHY







Science Institute— the largest contribution ever made by a UC San Diego alum. CSE PhD student Vishwajith Ramesh has been honored as a Siebel Scholar. Each year, the Siebel Scholars program recognizes nearly 100 exceptional students from the world's leading business, computer

science, energy science and bioengineering graduate schools. Ramesh is a PhD candidate and NSF Fellow. His research focuses on creating software tools, using machine learning and signal processing, to identify

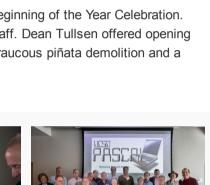
platform's explosive growth. He also worked at Loudcloud, eBay and Blizzard Entertainment before returning to UC San Diego as a lecturer. In 2017, Halıcıoğlu committed \$75 million to establish the Halıcıoğlu Data

networks through Interleaved Bit-Partitioned Arithmetic. **Community in Action** 

PhD student Soroush Ghodrati received a bronze in the student research competition at the IEEE/ACM International Symposium on Microarchitecture for Mixed-Signal Charge-Domain Acceleration of Deep Neural

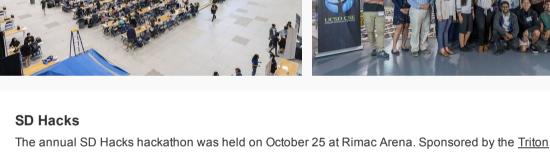






and assess neurological disorders and respiratory diseases.

**UCSD Pascal Group Reunion Honors Kenneth Bowles** Twenty-two UCSD Pascal Group alumni gathered for a Homecoming Weekend reunion to honor the memory of Kenneth Bowles, a UC San Diego faculty member for 19 years. Bowles gained world recognition for helping create the UCSD Pascal programming system. In 2004, a scholarship fund was created to honor Professor Bowles' legacy, supporting undergraduates majoring in Computer Science and Engineering.



Liao contributed opening remarks.

**Interviewing Tips from Industry Pros** 



## Engineering Student Council, the event attracted hundreds of hackers with dozens of projects. CSE and the CSE Alumni Advisory Board hosted an alumni reception in conjunction with the the event. Jacobs School of Engineering Dean Al Pisano, CSE Chair Dean Tullsen and CSE Alumni Advisory Board President Aaron

On October 24, CSE alums Neil Carlson (Qualcomm), Neha Chachra (Facebook), Lindsay Fowler (Amazon), Aaron Liao (Amazon Web Services), Surya Manchikanti (Google) and Valetin Robert (Galois) discussed competing for tech jobs and other industry insights. Around 40 students queried the panelists and networked

**CENTER FOR NETWORKED SYSTEMS** 



research and discuss the posters.

Turing Scholarship

that has bedeviled researchers for nearly six decades.

"If you have a large enough mathematical object of some nature, there has to be some hidden structure inside it," said Shachar Lovett of the University of California, San Diego, a co-author of the new work along with **Ryan Alweiss** of Princeton University, Kewen Wu of Peking University and Jiapeng Zhang of

at the reception.

# **CNS Research Review**

More than 80 people attended the CNS annual research review, which was held on October 10 and 11 in the CSE building. The event featured seventeen research talks and twelve lightning talks by UC San Diego faculty and graduate students. Afterwards, the poster session reception and dinner at the Great Hall gave industry guests a unique opportunity to meet with CNS graduate students, review their

To learn more about CNS and the research review, including details about the talks, check out the event page or visit the CNS website. If you know a company that has research interests in storage system design, network measurement and traffic analysis, wireless networking, programming language design, cyber-physical security, data center networking, cybercrime analytics or scalable data processing and

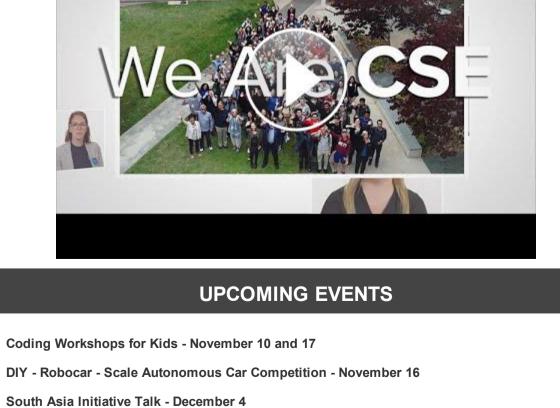
CNS is accepting applications for the 2020-2021 Alan Turing Memorial Scholarship through January 2020. The scholarship supports undergraduates majoring in computer science, computer engineering

wants to find out more about becoming a CNS industry member, please drop us an email.

or other degrees touching on networked systems who actively support the LGBT community. **CSE IN THE NEWS** Quanta Magazine: Mathematicians Begin to Tame Wild 'Sunflower' Problem A team of mathematicians and computer scientists has finally made progress on a seemingly simple problem

**CSE TV HIGHLIGHT** 

Harvard University.



# CSE Open House - January 31, 2020 For more info, visit the CSE Events Calendar

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