## UC San Diego JACOBS SCHOOL OF ENGINEERING



### We've hired 90 faculty in 5 years

The Jacobs School of Engineering welcomes 15 new faculty in 2018. These talented individuals are among the 90 faculty hired in the last five years. We are attracting people who want to work in our collaborative and energetic culture that welcomes bold ideas with mission-driven impact. And our faculty get results. For the 2nd year in a row, the Jacobs School ranks #1 in the nation among public engineering schools for research expenditures per faculty member.

Learn more: <a href="https://www.bit.ly/90NewFaculty">bit.ly/90NewFaculty</a>

# 90 NEW FACULTY

19 17 13 26 15 2014 2015 2016 2017 2018



### Help shape the future of Healthcare Robotics

Register today for the Contextual Robotics Institute Forum on Healthcare Robotics on Thursday, Nov. 8. With a rapidly aging population, physical and cognitive impairment across all ages, and an overburdened healthcare workforce, there are growing opportunities and needs for robotic technologies in the health space. Join us at UC San Diego on Nov. 8 as clinicians, technologists and academics converge for an interactive day focused on state-ofthe-art advances and future challenges.

Learn more: <a href="http://www.bit.ly/HealthcareRobotics">bit.ly/HealthcareRobotics</a>

# \$2M to empower students underrepresented in computer science

A program at the Jacobs School of Engineering designed to increase retention of underrepresented students in computer science earned a \$2 million boost from the National Science Foundation. The funds will support expansion of the Early Research Scholars Program to at least seven universities, beginning with Stanford University, UC Santa Barbara and the University of Illinois at Chicago. "Our end goal is to create a flexible and easy-to-implement program that can be initiated by any university with a significant research program," said Christine Alvarado, associate teaching professor of computer science at UC San Diego and a founder of the program.



Learn more: bit.ly/ERSPgrant



### Patch monitors blood pressure deep inside body

Nanoengineers at UC San Diego are adding a third dimension to the sensing range of wearable electronics. They developed a wearable ultrasound patch that can non-invasively monitor blood pressure in arteries deep beneath the skin. "Wearable devices have so far been limited to sensing signals either on the surface of the skin or right beneath it. But this is like seeing just the tip of the iceberg," said Sheng Xu, a professor of nanoengineering at the Jacobs School of Engineering affiliated with the Center for Wearable Sensors, and the corresponding author of the study. The patch could help people detect cardiovascular problems earlier and with greater precision than current clinical methods.

### Engineering grad students honored as Siebel Scholars

Five Jacobs School of Engineering graduate students working to improve immunology, cardiac health, blood transfusions and our understanding of the genome have been named 2019 Siebel Scholars. The Siebel Scholars program recognizes the most talented students in the world's leading graduate schools of business, computer science, bioengineering and energy science. UC San Diego is ranked the #1 bioengineering doctoral program in the nation, according to the latest National Research Council rankings.

Learn more: bit.ly/SiebelScholars2019





### DOE funds research to develop cobalt-free batteries

Engineers at UC San Diego were awarded \$2.5 million from the U.S. Department of Energy for battery research in advanced vehicle technologies. The project is aimed at developing cobalt-free cathode materials for next-generation lithium-ion batteries. Shirley Meng, a professor of nanoengineering and the director of the Sustainable Power and Energy Center at UC San Diego, is leading the project, which includes Maxwell Technologies, a San Diego-based company that develops and manufactures energy storage and power delivery solutions.

Learn more: <a href="mailto:bit.ly/CobaltFreeGrant">bit.ly/CobaltFreeGrant</a>

#### Remembering Ken Bowles, creator of UCSD Pascal

Kenneth (Ken) Bowles, a computer science pioneer and professor emeritus at the University of California San Diego, passed away on Aug. 15, 2018. Bowles gained world renown for initiating and leading a largely student-driven project that culminated in the creation of the UCSD Pascal programming system in the late 1970s, which included a programming language, an operating system and a whole suite of other tools. UCSD Pascal influenced many aspects of computing that are now ubiquitous, including modern PCs and Macs as well as Sun Microsystem's Java language. During his 19-year tenure on campus, Bowles helped nurture many students and researchers who went on to make breakthroughs of their own.



Learn more: <u>bit.ly/KenBowles</u>



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