# UC San Diego JACOBS SCHOOL OF ENGINEERING



## 26 New Hires for the Jacobs School Hired in 2017

The UC San Diego Jacobs School of Engineering hired a record 26 professors this year. In the last four years alone, the Jacobs School has hired more than 75 professors. Women as well as individuals from other groups traditionally underrepresented in engineering make up one-third of these hires. Many of these new faculty work in strength areas the school has added in the last four years, including: nanomaterials for biomedical and renewable energy applications; context-aware robotics; computer vision and machine learning; and hardware-software co-design and cyber-physical systems.



Learn more: http://bit.ly/26hires



## IBM, UC San Diego Partner on AI for Healthy Living

UC San Diego and IBM Research have launched the Artificial Intelligence for Healthy Living Center in order to enhance quality of life and independence for aging populations. Over the course of five years, researchers will study the impact that a combination of daily habits, the environment, genetics and the microbiome have on the cognition of older adults. The collaborative research initiative will use AI to comb through massive amounts of data to enable healthier living. Computer science professor Tajana Rosing and Rob Knight, a faculty member in pediatrics and computer science co-lead the UC San Diego portion of the Center. Learn more: http://bit.ly/AlHealthyLiving

### Aerospace Pioneer Joins the Jacobs School

David Whelan, a UC San Diego alumnus and pioneering figure in the aerospace industry, joined the faculty of the Jacobs School of Engineering this year as a professor of practice. Former chief technology officer at Boeing Space, Defense & Security; former director of the Tactical Technology Office at DARPA; and a member of the Defense Science Board, Whelan will help the Jacobs School better compete for research contracts while working to strengthen the school's ties to industry. "David Whelan is working with me to help make sure Jacobs School engineers are working on challenges that will have the greatest positive impact possible," said Albert P. Pisano, dean of the Jacobs School of Engineering.

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



### **Robotics Cluster at Jacobs School Keeps Building**



From self-folding robots, to robotic endoscopes, to better methods for computer vision and object detection, Jacobs School engineers and computer scientists had a wide range of papers and workshop presentations at this year's International Conference on Intelligent Robots and Systems (IROS 2017). The IROS 2017 theme: friendly people, friendly robots. The Jacobs School's showing at IROS highlights the school's growing strengths in many areas of robotics including manufacturing, materials, healthcare and autonomy, according to robotics pioneer Henrik Christensen, director of the UC San Diego Contextual Robotics Institute. Learn more: http://bit.ly/IROS2017



## Squid Ink, Nanotech and Dentistry

By combining squid ink with light and ultrasound, UC San Diego nanoengineers developed a new dental imaging method to examine a patient's gums. The new approach is non-invasive, more comprehensive and more accurate than the state of the art. The work could one day make getting checked for gum disease at the dentist less tedious and even painless. "The last time I was at the dentist, I realized that the tools that are currently being used to image teeth and gums could use significant updating," said Jesse Jokerst, the nanoengineering professor leading the project.

Learn more: http://bit.ly/SquidInkDental

# 4 Physician-Engineer Teams Funded by UC San Diego

Four physician-engineer teams from UC San Diego have been funded through a campus program focused on leveraging engineering for breakthroughs in medicine. The funding supports development of innovative technologies that can be applied to solving challenging problems in medical care. This year's projects are in cardiology, ophthalmology, radiology, and reproductive medicine, and include a new, minimally invasive intervention to treat cerebral aneurysms as well as nanosensors to detect placental dysfunction early in pregnancy. The program, Galvanizing Engineering in Medicine, is a collaboration between the UC San Diego Altman Clinical and Translational Research Institute and UC San Diego Institute of Engineering in Medicine.

Learn more: <u>http://bit.ly/EngineeringMedicine</u>



#### Contextual Robotics Institute Forum is Oct 27: Register Today

Intelligent Vehicles 2025. That's the theme for the fourth annual robotics forum from the UC San Diego Contextual Robotics Institute. Register today. The October 27 event at UC San Diego offers panels and talks on Autonomy, Social and Legal Implications of Autonomous Driving, Vehicle Technologies, and User Experience. At multiple networking sessions, connect with top researchers and thought leaders, students and industry professionals working on all aspects of intelligent vehicles. Interact with the latest intelligent vehicle projects as well as broader robotics research at the technology showcase.

Learn more: RoboticsForum.ucsd.edu



#### SIGN UP FOR THE

#### JACOBS SCHOOL MONTHLY EMAIL

A monthly news digest from the UC San Diego Jacobs School of Engineering.



bit.ly/JacobsSchoolEmail

Contact newsletter editor, Daniel Kane: dbkane@ucsd.edu