UC San Diego
JACOBS SCHOOL OF ENGINEERING

2022
NEW FACULTY

MORE
WOW.

We hire faculty with clear-eyed determination, technical smarts, creativity, and the openness to collaborate across disciplines and industries.

We make **bold** possible.

UC San Diego
JACOBS SCHOOL OF ENGINEERING

THIRTY FIVE IN THREE

In three years, we are hiring another 35+ new faculty. Welcome to year one!

I'm proud to introduce our 2022 faculty hires. These dynamic, creative faculty represent the first year in our latest three-year, 35+ faculty hiring cycle. In 2024, we'll be well above 300 faculty, and more than half will have joined in just the last 10 years. To put it another way, the UC San Diego Jacobs School of Engineering is a young, powerful school! Our professors, students, and staff are hungry to innovate. And as we innovate, we deeply listen to our collaborators and we consider the larger contexts. This is how we make bold possible. It's more than a catch phrase; it's who we are.

It's a particularly exciting time for the Jacobs School. Faculty and students are moving into Franklin Antonio Hall, our new building for research, education and industry collaboration. (Yes, that's a real photo of Franklin Antonio Hall on the back of this brochure!)

Franklin Antonio Hall is emerging as a national model for engineering research. We designed the building from the ground up to maximize the circulation of people and ideas. We've eliminated silos by placing complementary research teams in the large, shared research collaboratories.

We are already seeing the benefits from the cross pollination of ideas. And this is just the start. In the coming months, when all 13 of these collaboratories are fully up and running, we'll have created the physical and intellectual ecosystems that are critical for fully leveraging engineering and computer science for the public good.

If you are interested in learning more or collaborating with the Jacobs School, please get in touch. As always, I can be reached at:
DeanPisano@eng.ucsd.edu

Sincerely,
Al
Albert P. Pisano
Dean, UC San Diego Jacobs School of Engineering

REEM KHOJAH
Assistant Teaching Professor
PhD from University of California Los Angeles

Khojah develops mini-organs featuring novel micro-robotic systems that enable artificial intelligence to be part of the creative process in drug discovery pipelines. Her research aims to understand how the tumor micro-environment orchestrates drug-resistance pathways, which can lead to new insights in cancer prognosis and drug response.

BIOENGINEERING

reemkhojah@ucla.edu • @reemkhojah

Previously: Postdoctoral Researcher, University of California Irvine

VIRA KRAVETS
Assistant Professor
PhD from University of Colorado Colorado Springs

Kravets' research focus is electrical, paracrine, and neural networks of insulin-producing beta-cells in healthy and diabetic conditions. Using advanced optical imaging and computational modeling, Kravets studies subpopulations of cells which disproportionately affect the rest of the population and are important in diabetes pathogenesis.

BIOENGINEERING

vira.kravets@cuanschutz.edu • @KravetsVira

Previously: Postdoctoral Fellow, U of Colorado Anschutz Medical Campus

ALYSSA TAYLOR
Associate Teaching Professor
PhD from University of Virginia, Charlottesville

As a leader in bioengineering curriculum development, Taylor seeks to prepare students to engage in Universal Design, considering accessibility in their design work. Taylor aims to foster the development of inclusive, thoughtful engineering graduates who will integrate their technical and professional skills to positively impact society.

BIOENGINEERING

atayloramos@ucsd.edu

Previously: Associate Teaching Professor, University of Washington

MICHAEL COBLENZ
Assistant Professor
PhD from Carnegie Mellon University

Coblenz studies how to design programming languages to improve developers' productivity. He developed PLIERS (Programming Language Iterative Evaluation and Refinement System), which is a method of integrating user-centered design into the process of designing programming languages.

COMPUTER SCIENCE & ENGINEERING

mcoblenz@ucsd.edu • @mcoblenz

Previously: Postdoctoral Fellow, University of Maryland

EARLENCE FERNANDES
Assistant Professor
PhD from University of Michigan, Ann Arbor

Fernandes' goal is to enable society to gain the benefits of emerging technologies without the security and privacy risks. He builds secure systems for emerging technologies. He is currently interested in Internet-scale end-user automation, cyber-physical systems, machine learning and mixed reality.

efernandes@ucsd.edu • @EarlenceF

COMPUTER SCIENCE & ENGINEERING

Previously: Assistant Professor, University of Wisconsin, Madison

DANIEL GRIER
Assistant Professor
PhD from Massachusetts Institute of Technology

Grier's research is in quantum complexity theory. He is particularly interested in near-term quantum computing paradigms and proving that they exhibit an advantage over their classical counterparts. Joint hire with the Department of Mathematics.

dgrier@ucsd.edu

COMPUTER SCIENCE & ENGINEERING

Previously: Postdoctoral Fellow, University of Waterloo

AMY OUSTERHOUT
Assistant Professor
PhD from Massachusetts Institute of Technology

Ousterhout is primarily interested in operating systems and networks in datacenters. Her recent research focuses on improving the efficiency of datacenter applications. She designs software systems that improve the resource efficiency and usability of applications in datacenters, without degrading application performance.

aousterhout@ucsd.edu

COMPUTER SCIENCE & ENGINEERING

Previously: Postdoctoral Researcher, UC Berkeley

JORGE POVEDA
Assistant Professor
PhD from University of California Santa Barbara

Poveda analyzes and designs high-performance and adaptive feedback control algorithms for complex non-smooth and hybrid dynamical systems. Such tools could enable safe, optimal and autonomous operations of cyber-physical systems such as the power grid, transportation systems, automated agricultural systems, mobile robots and social networks.

poveda@ucsd.edu • @JoiPoFo

ELECTRICAL & COMPUTER ENGINEERING

Previously: Assistant Professor, University of Colorado, Boulder

XUANTING HAO
Assistant Professor
PhD from University of Minnesota

Hao seeks to understand the small-scale fluid motions at the atmosphere-ocean interface. He builds physics-based and data-driven models of sea-air processes, such as wind turbulence, surface gravity waves and sunlight propagation – and their interactions. Applications include weather forecasting, renewable energy harvesting and marine infrastructure protection. Joint hire with Scripps Institution of Oceanography.

x3hao@ucsd.edu

MECHANICAL & AEROSPACE ENGINEERING

Previously: Postdoctoral Associate, University of Minnesota

MAMADOU DIAGNE
Assistant Professor
PhD from University Claude Bernard Lyon, France

Diagne focuses on the control of different types of differential equations in systems that arise in a number of complex multi-physics processes described by mass, energy and momentum balance laws. Applications range from the control of sedimentation in water channels and reservoirs to controlling the spread of epidemics.

mdiagne@ucsd.edu

MECHANICAL & AEROSPACE ENGINEERING

Previously: Assistant Professor, Rensselaer Polytechnic Institute

MEHRAN TEHRANI
Assistant Professor
PhD from Virginia Tech

Tehrani researches multifunctional composites, at the intersection of advanced manufacturing, materials science and mechanics. Projects include additively manufactured polymer composites, metal-nanocarbon hybrid conductors, sustainable multi-material additive manufacturing, robotics composite manufacturing and graphene-based structural composites.

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STRUCTURAL ENGINEERING

Previously: Assistant Professor, UT Austin

UC San Diego
JACOBS SCHOOL OF ENGINEERING

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FRANKLIN ANTONIO HALL NOW OPEN!
A unique, new hub in UC San Diego's innovation ecosystem

With its large, multi-team research laboratories, Franklin Antonio Hall has emerged as a national model for collaborative, systems-level research; experiential education; and industry collaboration to drive relevance. Increasing the circulation of people and ideas is how we leverage engineering and computer science for the public good.

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