2024
NEW FACULTY

Our faculty stand out for their ability to innovate for the public good.

We are world-renowned for tackling humanity's toughest challenges through a combination of technical excellence, clear-eyed determination, creativity, and discipline-bridging innovation.

The new faculty we hired in 2024 are absolutely incredible — and they are jumping right in.

We make **bold** possible.

We build synergies across UC San Diego's $1.73 Billion research ecosystem.

Our new faculty are absolutely incredible! I am proud of these hires, and I am confident that these professors will succeed in their efforts to advance engineering and computer science for the public good.

These new faculty are now part of the Jacobs School's powerful research, education and innovation ecosystems. Our physical and intellectual spaces provide many opportunities for faculty to break down barriers and take on the toughest problems no discipline or industry can solve alone.

What's more, our Jacobs School faculty build synergies across UC San Diego's $1.73 billion campuswide research enterprise. A research enterprise this large offers unparalleled opportunities to Jacobs School faculty to advance engineering and computer science while working with colleagues all across UC San Diego to solve profound challenges facing humanity.

Please join me in welcoming this newest cohort of faculty to the Jacobs School community.

Together, we make **bold** possible.

Albert P. Pisano

Dean, Jacobs School of Engineering

Special Adviser to the Chancellor

PRITHVIRAJ AMMANABROLU
Assistant Professor
Ph.D. Georgia Tech

Ammanabrolu works to create trustworthy and responsible language-based AI agents that can align to human preferences after getting feedback, and can use neurosymbolic world models to guide their actions in grounded environments. He aims to imbue these agents with the ability to understand and generate contextually relevant natural language.

prithvi@ucsd.edu • X @rajammanabrolu

COMPUTER SCIENCE & ENGINEERING

Previously: Research Scientist, MosaicML and Allen Institute for AI

TREVOR BONJOUR
Assistant Teaching Professor
Ph.D. Purdue University

Bonjour's work focuses on AI and AI education, with interests in machine learning, reinforcement learning, and causal inference. His current research focuses on developing reinforcement learning techniques for adaptive agents in novel, multi-agent environments. He also works on creating evidence-based approaches to enhance student learning of complex AI concepts.

tbonjour@ucsd.edu

COMPUTER SCIENCE & ENGINEERING

Previously: Ph.D. Student, Purdue University

ERIKA CYPHERT
Assistant Professor
Ph.D. Case Western Reserve University

Cyphert's research lies at the intersection of polymer chemistry, drug delivery, microbiology, the microbiome and bioinformatics. Her lab engineers responsive carriers for therapies to target microbiota communities and address diseases that are associated with microbiota composition (GI disorders, infectious diseases, cancer, bacterial vaginosis).

ecyphert@ucsd.edu • X @ELCyphert_PhD

BIOENGINEERING

Previously: Postdoctoral Researcher, Cornell U and UC San Francisco

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LORIS D'ANTONI
Associate Professor
Ph.D. University of Pennsylvania

D'Antoni focuses on helping people write software they can trust. His research combines formal techniques and machine learning approaches to generate computer programs that match human intents and to help people understand what the software they wrote does. His work has been applied to decision-making software, network configurations, and personalized education.

ldantoni@ucsd.edu • X @lorisdanto

COMPUTER SCIENCE & ENGINEERING

Previously: Assoc Professor, U of WI Madison and Visiting Academic, AWS

NURIA GONZALEZ-PRELCIC
Professor
Ph.D. Universidade de Vigo, Spain

Gonzalez-Prelcic works in signal processing and machine learning for wireless communication and sensing. She develops next-generation cellular and WiFi systems that exploit multiple antenna transceivers to increase data rate and provide high accuracy localization and sensing information, with applications in automated vehicles, robotics and smart homes.

ELECTRICAL & COMPUTER ENGINEERING

ngprelcic@ucsd.edu

Previously: Associate Professor, North Carolina State University

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RAHUL PARHI
Assistant Professor
Ph.D. University of Wisconsin-Madison

Parhi's research lies at the interface between signal processing, machine learning and statistics to develop a mathematical theory of deep learning. His work aims to provide a rigorous theoretical foundation for understanding the remarkable performance of deep learning models that underlie most state-of-the-art AI methods.

ELECTRICAL & COMPUTER ENGINEERING

rparhi@ucsd.edu • 𝕏 @RahulParhi

Previously: Postdoc Researcher, École Polytechnique Fédérale de Lausanne

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ROBERT HEATH
Professor, Charles Lee Powell Chair in Wireless Communications
Ph.D. Stanford University

Heath specializes in the intersection of communication theory, signal processing and information theory. His research is centered on multiple-input multiple-output (MIMO) wireless communication systems that leverage multiple antennas. His work has significant applications in both commercial and defense-related wireless communication systems.

ELECTRICAL & COMPUTER ENGINEERING

rwheathjr@ucsd.edu

Previously: Lampe Distinguished Professor, North Carolina State University

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LIANHUI QIN
Assistant Professor
Ph.D. University of Washington

Qin works on natural language processing and machine learning. She focuses on machine reasoning and generation; understanding and improving large language/multi-modal models and AI/LLM for science, engineering, health, including reasoning for chemistry, weather/climate, healthcare, and control engineering.

COMPUTER SCIENCE & ENGINEERING

l6qin@ucsd.edu • 𝕏 @lianhuiq

Previously: Ph.D. student from University of Washington

DEEPAK KUMAR
Assistant Professor
Ph.D. University of Illinois at Urbana-Champaign

Kumar's research focuses on sociotechnical cybersecurity—an area of security dealing with threats at the interface of society and technology. Threats include online harassment and abuse, and mis/disinformation—and more. He measures how these threats spread online and proposes new defenses, tools, and interventions to keep Internet users safe from unwanted harms.

COMPUTER SCIENCE & ENGINEERING

kumarde@ucsd.edu • 𝕏 @_kumarde

Previously: Postdoctoral Researcher, Stanford University

NOAH RUBIN
Assistant Professor
Ph.D. Harvard University

Rubin's work in the field of nanophotonics focuses on developing innovative components that control light using structures as small as its wavelength. Focused on manipulating light's polarization state, his research aims to create new types of optics and optical systems with wide-ranging applications, including advancements in astronomy, sensing and beyond.

ELECTRICAL & COMPUTER ENGINEERING

noahrubin@ucsd.edu

Previously: Postdoctoral Researcher, Harvard University

JENNIFER MULLIN
Associate Teaching Professor
Ph.D. Virginia Tech

Mullin focuses on engineering education research and curriculum development with an emphasis on creativity, design thinking and project-based pedagogy. Her work at the intersection of engineering design, technical communication and problem-solving utilizes informed instructional choices through a "learn-by-doing" approach to enhance and enrich the undergraduate educational experience.

MECHANICAL & AEROSPACE ENGINEERING

jmullin@ucsd.edu

Previously: Associate Professor of Teaching, UC Davis

18 NEW ENDOWED CHAIRS
AT THE UC SAN DIEGO JACOBS SCHOOL OF ENGINEERING

It has been incredible to create and fill 18 new endowed chairs this year. What a powerful resource! The faculty who hold these new endowed chairs are accelerating our mission to advance engineering and computer science for the public good.

Thank you to Irwin and Joan Jacobs, whose vision and generosity made these new endowed chairs possible. It is wonderful to be able to honor, in perpetuity, the 18 early Jacobs School faculty whose names are each part of an endowed chair.

To everyone who has helped us create and fill our 70+ endowed chairs, and to everyone who is inspired to get involved in this critical work, thank you!

JacobsSchool.ucsd.edu/18