Franklin Antonio Hall is designed to facilitate cross-discipline collaborations that are critical for solving the toughest health, energy, autonomy, security, communications, and materials challenges facing society.
15 new faculty in 2018

90 faculty hires in 5 years

Faculty with clear-eyed determination, technical smarts, creativity, and the openness to collaborate make bold ideas possible.

That’s who we hire at the Jacobs School of Engineering.

That’s how we’ll work in Franklin Antonio Hall.
Franklin Antonio Hall

A new engineering facility designed for collaborative research, active learning, and technology transfer.

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Theory + Practice

“Our Collaboratories for the Digital Future are at the heart of Franklin Antonio Hall. These multi-PI labs will empower our faculty, students and industry partners to bring theory and practice together for ever greater positive impact.”

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

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Strategic Growth in 2018 with new faculty and future hires will make bold ideas possible.

TAYLOR BERG-KIRKPATRICK
Assistant Professor
Ph.D. University of California, Berkeley
Berg-Kirkpatrick focuses on developing machine learning techniques for understanding structured human data – including language, but also sources like music, historical ciphers, document images, and other complex artifacts. His research group aims to design unsupervised methods for such data that are able to learn without relying on labeled examples.
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Previously: Assistant Professor, Carnegie Mellon University

JINHYE BAE
Assistant Professor
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Bae focuses on understanding the deformation and assembly of soft matter at the nano- and micro-scales. Her research integrates the unique characteristics of soft materials such as hydrogels and elastomers into new approaches for applications in biomedical devices, soft robotics, actuators, and sensors.
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Fraenkel uses machine learning and experimental design to study large-scale abusive behaviors on the internet, particularly bot-driven events. His teaching expertise is in the end-to-end practice of data science, drawing from his industry experience with cybersecurity, anti-fraud, and anti-abuse systems.
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Semnani focuses on characterization and modeling of advanced materials for nanoelectronic devices. Some of the applications of her work include high-frequency microwave devices, high-speed electronic components, and high-capacity wireless network. She also investigates droplet-dynamics for the design or control of a system. He has developed new courses in engineering mechanics, design, and materials engineering.

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Strategic Growth in 2018

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Determination, technical engineering.

Previously: Assistant Professor, Carnegie Mellon University

NanoEngineering

Previously: Postdoctoral Research Associate, Harvard University

Computer Science & Engineering

TAYLOR BERG-KIRKPATRICK

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Teaching expertise is in the end-to-end practice of the internet, particularly robot-driven events. His research focuses on machine learning and experimental methods used for applications in biomedical devices, soft robotics, actuators, and sensors.

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Fraenkel’s research focuses on developing machine learning techniques for understanding structured labeled images, and other complex artifacts. His research involves the design of unsupervised methods for data recovery, data-conversion circuits, on-chip performance monitors, and signal processing.

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Teaching practice will focus on data science, drawing from his industry experience.

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From his industry experience, Sanford is interested in the application of artificial intelligence to the design of antennas, filters, signal processing routines and self-organizing networks. He recently served as CTO of Ubiquiti Networks, where he helped develop the world’s highest capacity wireless network. He has also founded two successful startups.

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JON POKORSKI

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Pokorski exploits both polymer chemistry and engineering to make materials that tackle complex biomedical problems. The Pokorski lab is particularly interested in engineering low-cost devices for immunotherapy, developing the next generation of polymer-conjugated protein therapeutics, and implementing novel chemistry for advanced wound dressings.

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ABHISHEK SAHA

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Saha’s research focuses on fundamentals of combustion and fluid mechanics with application in propulsion, energy, printing, and materials synthesis. He studies flame-dynamics towards clean and efficient operation of car/aircraft engines. He also investigates droplet-dynamics to improve inkjet printing and thermal sprays.

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NANOELECTRONICS

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Schmidt specializes in computational flow physics with an emphasis on flow instability, direct numerical simulation, and mode decomposition techniques. The goal of his research is to synergize data-driven modal decomposition and stability theory to facilitate physical understanding, modeling, and control of complex flows.

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Saha’s research focuses on fundamentals of combustion and fluid mechanics with application in propulsion, energy, printing, and materials synthesis. He studies flame-dynamics towards clean and efficient operation of car/aircraft engines. He also investigates droplet-dynamics to improve inkjet printing and thermal sprays.

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Nicole Steinmetz engineers plant-virus-based nanomaterials for human and plant health applications. She uses chemical biology methods to repurpose plant viruses to yield nanoparticles for applications such as drug delivery, molecular imaging, and next-generation vaccines and immunotherapies targeting cancer, cardiovascular disease, and infectious disease.

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