

April 13, 2024

# DAY AT THE BEACH

2024 ENGINEERING SHOWCASE





# Welcome to The Beach!



DEAN JINNY RHEE



Undergraduate  
Engineering Programs

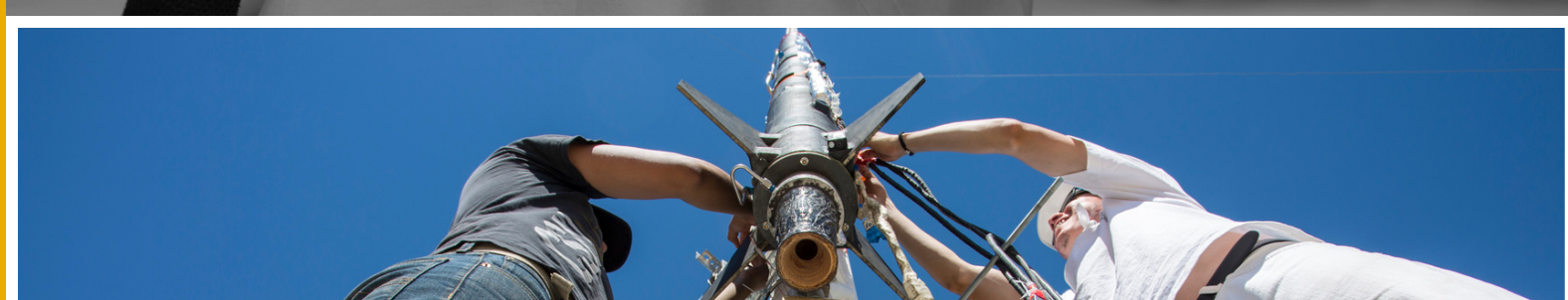
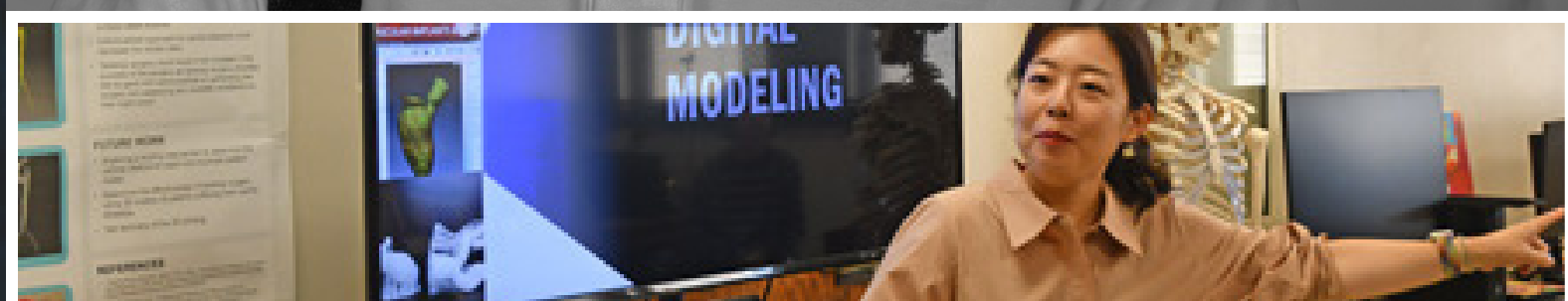


Research Funding  
(2022-2023)



Student Orgs & Clubs





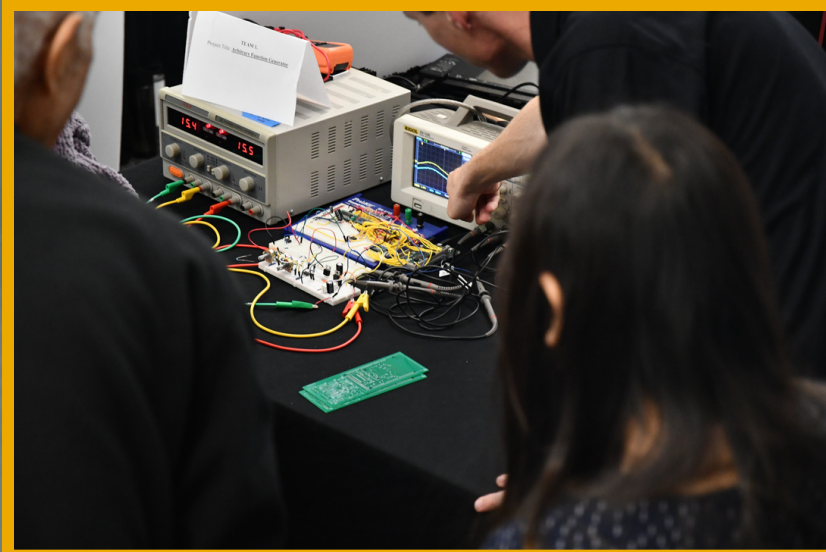
# COLLEGE OF ENGINEERING

- **Departments & Programs**
- **Engineering Student Success Center**
- **Project-Based Learning**
- **Research**
- **Senior Design Expo**
- **Beach Women in Engineering Conference**
- **Dean's Advisory Council**
- **Grand Challenges**



# Departments & Programs

- Biomedical Engineering
- Chemical Engineering
- Civil Engineering & Construction Engineering Management (*Environmental Engineering*)
- Computer Engineering & Computer Science
- Electrical Engineering (*Computer Engineering Technology*)
- Mechanical & Aerospace Engineering







# Engineering Student Success Center

First-Year  
Experience

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Beach XP/BESST



Professional  
Development &  
Networking

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Engineering  
Honors Track



Advising

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Tutoring in Major  
Courses







# RESEARCH

- Over \$25 Million in grants and contracts in the last five years
- More than 60 active faculty researchers
- Over 100 technical publications annually, mostly with students as co-authors
- CSULB elevated to R2 status in 2022

- Transportation
- Autonomous Vehicles
- Sustainable Buildings
- Coastal Sustainability
- Rocket Propulsion
- Environmental Sustainability
- Wind Energy
- Chips Design
- Cyber Security
- Artificial Intelligence
- Boiling
- Sustainable Construction Materials
- Optical Communications
- Smart Prosthetics
- Bioinformatics
- High Impact Materials
- Smart Materials
- Composite Materials
- Electric Vehicles
- Water Resources and Contaminations
- Emission Control Technology
- Smart Buildings





# Senior Design Project Expo





# BEACH Women in Engineering Conference

- 75+ Speakers, including recent grads, technical experts & senior leaders
- Majors Sponsors: Southern California Edison, Port of Long Beach, Hyundai, & More
- Direct connections via Coaching Circles, Speed Networking





# DEAN'S ADVISORY COUNCIL







# GRAND CHALLENGES FOR ENGINEERING



- Advance Personalized Learning
- Make Solar Energy Economical
- Enhance Virtual Reality
- Reverse-Engineer the Brain
- Engineer Better Medicines
- Advance Health Informatics
- Restore and Improve Urban Infrastructure
- Secure Cyberspace
- Provide Access to Clean Water
- Provide Energy from Fusion
- Prevent Nuclear Terror
- Manage the Nitrogen Cycle
- Develop Carbon Sequestration Methods
- Engineer the Tools of Scientific Discovery





# DAY AT THE BEACH

- Digital map online
- All departments in Quad
- Meet 10 minutes before lab tour
- Please ask questions and Have fun!







**GO BEACH!!!**