Selected Highlights of the BASKIN SCHOOL OF ENGINEERING

Home to more than a dozen research centers and institutes across the seven departments, the Jack Baskin School of Engineering is a dynamic environment for innovative research and education.

COMMITMENT TO HEALTH SCIENCE AND TECHNOLOGY RESEARCH, demonstrated through basic research and new technology development, and recognized by grants from federal agencies, private foundations and industry.

- David Haussler and team won two foundation awards for the Human Genome Variation Map.
- UC Santa Cruz hosted the first computer science degree program within the UC system, starting in Fall 2006.
- The BSoE Center for Games and Playable Media houses five games-related research labs including the Expressive Intelligence Studio, one of the largest technical game research groups in the world.
- BSoE’s newest department, Computational Media, is dedicated to the creation, enhancement, and study of computer-based media forms.
- UC Santa Cruz hosts two innovative graduate programs. One of these—the Digital Arts and New Media MFA—involved a unique collaboration between Engineering and the Arts division.

FOCUS ON HUMAN-CENTERED DESIGN, including assistive technologies for the blind and people with special needs.

- Sri Kurniawan collaborated with UC San Diego to win an NSF grant to develop a “big weather” infrastructure for addressing big data challenges in weather prediction research and education.
- Carlos Maltzahn won a NSF grant to build a “big weather” infrastructure for addressing big data challenges in weather prediction research and education.

DATA SCIENCE LEADERSHIP with a focus on data science for social good.

- Building data science programs focused on social good, BSoE engages students, faculty, alumni and the community.
- Near-term goals include launching a new center focused on the promises and challenges of data. Planning for the center, Data, Discovery and Decisions: A Center of Excellence in Data Science, is currently underway.
- Darrell Long won a three-year award from NSF for improving storage system performance on large-scale, high-performance computing systems.

- Carlos Maltzahn and Scott Brandt brought in a $2.5M gift to found the Center for Research in Open Source Software (CROSS) and establish an endowed Chair in Computer Science.

ROBOTICS AND AUTONOMOUS SYSTEMS is an active research area in the BSoE.

- Ricardo Santelice won a three-year highly competitive AFOSR grant for research on hybrid systems theory that will enable robust autonomy in complex networks.
- Gabriel Elkaim became a founding member and executive committee member of the new CITRIS People and Robotics initiative.

To read more about these highlights and other news about the Baskin School of Engineering, go to soe.ucsc.edu/news/archive

DATA SCIENCE WEEK AT UCSC
Science, Research and Policy

RESEARCH REVIEW DAY

OCTOBER 14, 2015
Plenary Speakers:

9:10 AM
Stuart Lindsay
Biophysics Institute, Arizona State University
“Single Molecule Protein Sequencing — Why does it matter and can it be done?”

11:25 AM
Rayid Ghani
Director, Center for Data Science & Public Policy; Senior Fellow, Harris School of Public Policy and the Computation Institute, University of Chicago
“Doing and Teaching Practical Data Science for Social Impact”

2:30 PM
Michael Schwartz
Market Place Designer, Google Research
“Market Design in Theory and Practice”

PROGRAM

8:15–8:55 AM
Check-in and Refreshments
BASKIN ENGINEERING COURTYARD

9:00–9:10 AM
Welcome and Opening Remarks
ENGINEERING 2, ROOM 180

9:10–9:55 AM
Nanopore Plenary Speaker: Stuart Lindsay
ENGINEERING 2, ROOM 180

10:05 AM–2:20 PM
Faculty Research Presentations
Data Science for Social Good: ENGINEERING 2, ROOM 499
Nanopore: ENGINEERING 2, ROOM 506
Game Theory and Economics in Engineering: ENGINEERING 2, ROOM 599

11:25 AM–12:10 PM
Data Science for Social Good Plenary Speaker: Rayid Ghani
ENGINEERING 2, ROOM 180

12:10–1 PM
Lunch
COURTYARD

2:30–3:15 PM
Game Theory and Economics in Engineering
Plenary Speaker: Michael Schwartz
ENGINEERING 2, ROOM 180

3:25–4:30 PM
Graduate Student Poster Session
with light refreshments
ENGINEERING 2 LANAI
and rewarding.

UC Santa Cruz faculty and researchers are at the forefront of our shared research interests. From nanopore devices for 21st century sequencing of genomic data to the organization, manipulation and ultimate sequencing of genomic data to the management of information across an unfinished portion of the genome.