



11TH ANNUAL



GRAD
SLAM

FINALS

MARCH 12, 2025

CONFERENCE CENTER -

GRAND BALLROOM

DOORS OPEN AT 3:00PM

COMPETITION BEGINS AT 3:30PM



MICHAEL DIFRIERI

Third Year | Mechanical Engineering

Michael's research focuses on diagnosing plasma reactors with diverse configurations and investigating their potential for material modification. Specifically, their work aims to enhance the fire-resistant properties of materials used in housing construction, contributing to safer and more sustainable building practices. This innovative approach bridges plasma diagnostics and material science, offering practical applications for improving construction safety.



TELL US A FUN FACT ABOUT YOURSELF:

I had the most unconventional first job: construction worker for a boss who did stand-up comedy on the weekends. It was a crash course in both building structures and delivering punchlines!



HELIA HOSSEINPOUR

Fifth Year | Cognitive and Information Sciences

Helia's research examines how people understand and use data visualizations when making decisions. She is particularly interested in how individual differences, such as differences in working memory capacity and goals, influence where people direct their attention and interpret visualizations. She also studies implicit cognition, exploring how goals we are unaware of can shape attention and affect how people make decisions based on visual data.



TELL US A FUN FACT ABOUT YOURSELF:

When I was in kindergarten, I was part of a theater academy. One of my roles was playing the lead in a play about a little mouse and her father. That role made me somewhat famous for a while, but what I remember loving most about it was my costume: a big, puffy red dress with yellow tights!



ZACHARY MALONE

Fifth Year | Environmental Systems

Zachary studies how we can use organic wastes (like food waste and yard scraps) as a resource by creating compost from them and applying it to urban soils. Zachary specifically looks at how compost impacts soil carbon, an important property for soil quality and climate change, as well as soil nitrogen, which is vital for plant growth.



TELL US A FUN FACT ABOUT YOURSELF:

I worked for Yosemite as a National Parks Ranger for two years while an undergraduate at UC Merced.



LAURA LOPEZ

Fourth Year | Quantitative and Systems Biology

Laura's research explores how the immune system detects and responds to *Toxoplasma gondii*, a parasite that lives inside host cells. She discovered that a protein called STING, typically known for sensing DNA in the cell, plays a key role in helping immune cells (CD8+ T cells) produce interferon-gamma (IFN γ), which is essential for fighting the infection. Surprisingly, STING carries out this function without its usual DNA-sensing partner, revealing a new pathway that could improve our understanding of immune defense against intracellular parasites.



TELL US A FUN FACT ABOUT YOURSELF:

When I'm too tired, I start laughing at anything that doesn't make any sense, and my laugh is quite loud!



SHUBHAM ROHAL

Fourth Year | Electrical Engineering and Computer Sciences

Shubham Rohal's research interest broadly lies in the area of Smart Health, Mobile and Wearable Systems and Ubiquitous Computing. He develops novel low-cost sensors with AI models to improve people's quality of life in an affordable and accessible way.



TELL US A FUN FACT ABOUT YOURSELF:

My best friend is my 3D printer.



ALEX HARTZLER

Second Year | Mechanical Engineering

Alex studies how greases are designed for combustion engines and perform under electrified conditions similar to those in EVs. By understanding their behavior, Alex can develop better lubricants to extend EV longevity and contribute to cleaner air in the Central Valley and beyond.



TELL US A FUN FACT ABOUT YOURSELF:

I am the second youngest of nine siblings and the first in my family to attend college.



DONG YOON LEE

Second Year | Electrical Engineering and Computer Sciences

Dong's research focuses on making the world a safer place for senior people. For older adults that are aging in place, it is essential to provide nonintrusive monitoring for ease of mind for their caregiver. Dong turns homes into a smart sensor that can monitor senior people's activity without intruding on their privacy.



TELL US A FUN FACT ABOUT YOURSELF:

I play 2 instruments: cello and piano, and I am starting to learn guitar.



DEMITRIUS ZULEVIC

Third Year | Mechanical Engineering

Demetrius investigates advanced modeling techniques to accelerate plasma simulation times. By speeding up these simulations, we can more efficiently design and optimize plasma-based devices, such as plasma etching machines. Improved plasma etching leads to enhanced chip manufacturing, ultimately resulting in the better production of everyday electronics.



TELL US A FUN FACT ABOUT YOURSELF:

One of his personal hobbies is brewing mead and sharing it with others. For those unfamiliar, mead is a type of wine made from honey rather than grapes.



ADEKUNLE ADEWOLE

Fourth Year | Chemistry and Biochemistry

Kunle's research focuses on designing sequence-programmable peptide materials with predefined 3D geometries using peptide macrocycles that leverage the coiled-coil protein fold. By harnessing the biological nature of these materials, his work enables applications in medicine and biosensing, particularly in targeted drug delivery.



TELL US A FUN FACT ABOUT YOURSELF:

I want to go on The Voice USA.



SPECIAL THANKS TO OUR JUDGES

JOSIAH BEHARRY

Current Graduate Student in Interdisciplinary Humanities and Student Regent

BELINDA BRAUNSTEIN

Coordinator, English Language Institute

MARJORIE ZATZ

Special Assistant to the Chancellor and Professor of Sociology
