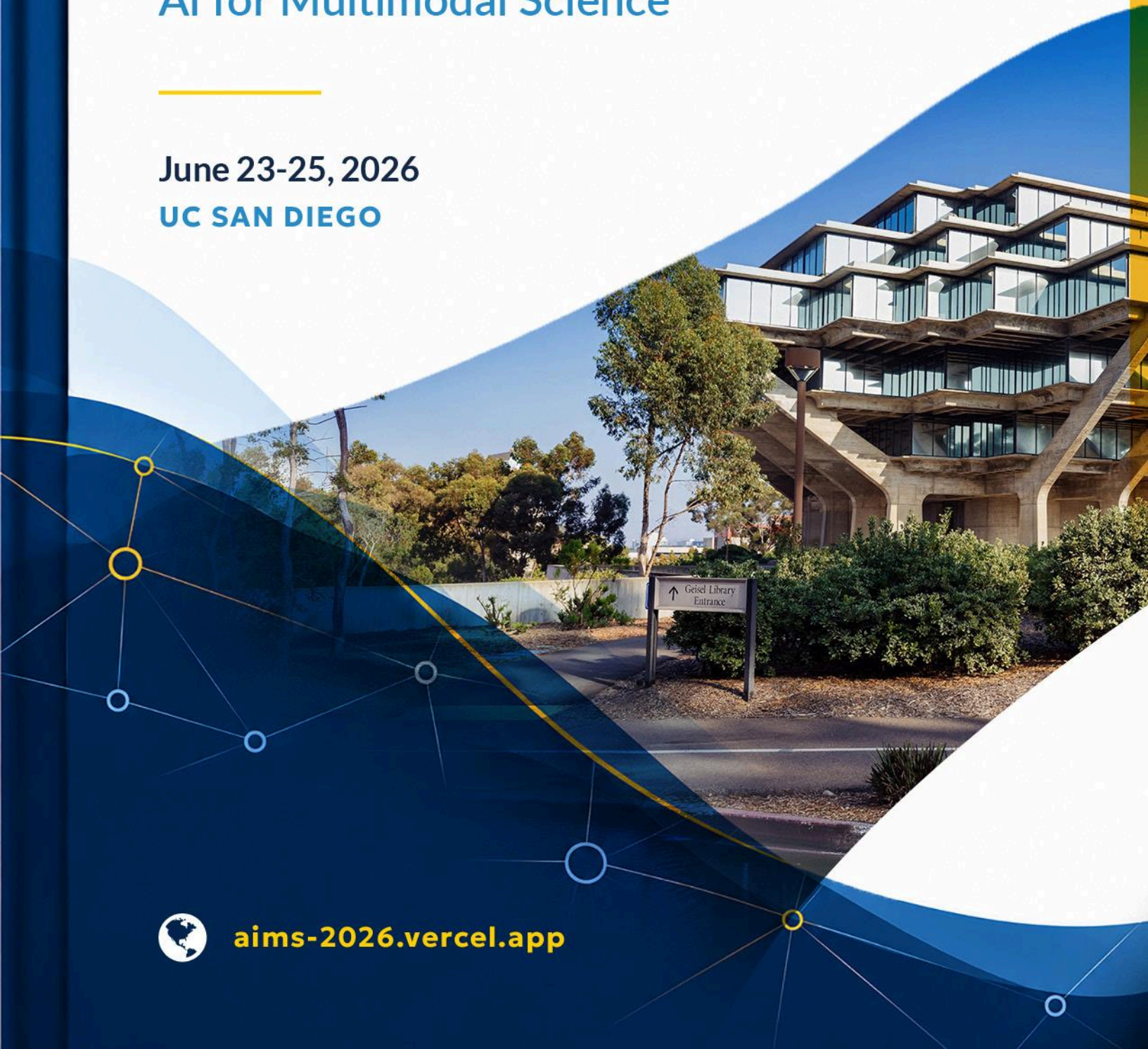
AIMS26

Ai for Multimodal Science

June 23-25, 2026

UC SAN DIEGO



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Welcome

ABOUT AIMS26

AIMS2026 (AI for Multimodal Science) is a three-day interdisciplinary workshop that brings together Schmidt Science Fellows from around the world and UC San Diego postdoctoral researchers to explore how multimodal artificial intelligence can accelerate discovery across scientific domains.

Multimodal AI sits at the forefront of modern research, enabling the integration of heterogeneous data types—such as images, time series, text, graphs, and simulations—to address complex scientific questions. These methods cut across biology, medicine, climate science, physics, materials science, and computer vision, where insights increasingly emerge from the fusion of multiple data modalities rather than from any single source alone.

While scientific datasets are often domain-specific, the core principles of multimodal fusion are broadly transferable. AIMS2026 emphasizes both **data-level multimodality** and **architecture-level multimodality**. By focusing on generalizable fusion patterns and model designs, the workshop equips participants with approaches that can be readily adapted across disciplines—simply by swapping in their own domain's data, tasks, and evaluation metrics.

Through a combination of lectures, hands-on sessions, and collaborative discussions, AIMS2026 aims to foster a shared technical language for multimodal AI in science, build cross-domain connections among early-career researchers, and empower participants to apply state-of-the-art multimodal methods to their own research challenges.

Event Details

WORKSHOP AT-A-GLANCE

DATES	June 23–25, 2026
MAIN VENUE	UC San Diego, Seventh College Tower West, 15th Floor, Room 15A
HOTEL	San Diego Marriott La Jolla
MAIN SESSIONS	Faculty/industry talks, coding tutorials, hackathon, lightning talks, alternative activities
EVENING EVENTS	Sandbox tour, free evening, awards dinner reception
EVENT WEBSITE	https://aims-2026.vercel.app/

PLACES TO VISIT NEAR UCSD / LA JOLLA

UC SAN DIEGO CAMPUS MAP >

Campus shuttle Live Shuttle Stracker

On Campus

- The Stuart Collection: 22 Artworks throughout the campus
- Geisel Library - Iconic 1970 design
- UC San Diego Bookstore for US San Diego goods and more
- University Centers Dining & Retail
- Places to Eat at UCSD

Near Campus

- Torrey Pines Gliderport, Cliffhanger Cafe and Bar *(Good for Sunset View)*
- Birch Aquarium at Scripps *(Good Ocean View)*
- La Jolla Shores Beach *(Good for Sunset View)*
- UTC Mall *(Near Marriott Hotel)*

VENUE INFORMATION

Wi-Fi

UC San Diego guest Wi-Fi information will be provided during check-in.

Emergency / Workshop Contact

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Attendees

ORGANIZERS

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SPEAKERS

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St Jude Children's Research Hospital

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AIMS 2026 Daily Schedule

AI for Multimodal Science | UC San Diego
June 23–25, 2026
Venue: UC San Diego, Seventh College – Tower West, 15th Floor, Room 15A

DAY 1 | TUESDAY, JUNE 23, 2026

TIME	SESSION	DETAILS
7:30 AM	Morning Shuttle Pickup	Pickup from San Diego Marriott La Jolla
7:50 AM	Shuttle Drop-off	Seventh College – Tower West
8:00 – 9:00 AM	Breakfast & Check-in	Light breakfast, badge distribution, and gift distribution
9:00 – 12:00 PM	Faculty / Industry Talks	Long-format talks: 45 minutes + 5 minutes Q&A each
9:00 – 12:00 PM	Speaker 1: Tara Javidi	Jacobs Family Scholar, Co-Founder & CTO at KavAI, Lewak Chair and Professor of Electrical & Computer Engineering, UC San Diego
9:00 – 12:00 PM	Speaker 2: Francisco Robles	Adjunct Assistant Professor, School of ECE, and Assistant Professor, Wallace H. Coulter Department of Biomedical Engineering, Georgia Tech and Emory

9:00 – 12:00 PM	Speaker 3: Rose Yu	Associate Professor, UC San Diego Computer Science and Engineering; Amazon Scholar
12:00 – 1:00 PM	Lunch	Catered lunch and networking
1:00 – 2:30 PM	Demo / Coding Tutorial	See the Tutorial Schedule section
2:30 – 3:00 PM	Afternoon Break	Coffee, tea, juice, and light snacks
3:00 – 5:00 PM	Hackathon Track	Room 15B. Hackathon kickoff led by Konstantinos Polyzos. Participants begin team work on 3D reconstruction using multiple sensing modalities such as images, radar, and/or LiDAR
3:00 – 5:00 PM	Alternative Activity Track	Room 15A. Participant lightning talks highlighting multimodal AI results, ongoing work, datasets, or research challenges
5:00 PM	Formal Program Ends	Daily sessions conclude
5:30 – 7:00 PM	UCSD Sandbox Tour	Goeddel Family Technology Sandbox tour with dinner
7:15	Evening Shuttle Pickup	From Technology Sandbox, UC San Diego Bonner Hall
7:40	Shuttle Drop-off	San Diego Marriott La Jolla

DAY 2 | WEDNESDAY, JUNE 24, 2026

TIME	SESSION	DETAILS
7:30 AM	Morning Shuttle Pickup	Pickup from San Diego Marriott La Jolla
7:50 AM	Shuttle Drop-off	Seventh College – Tower West
8:00 – 9:00 AM	Breakfast & Check-in	Light breakfast and networking
9:00 – 12:00 PM	Faculty / Industry Talks	Long-format talks: 45 minutes + 5 minutes Q&A each, with short breaks
9:00 – 12:00 PM	Speaker 1: Shalin Mehta	Group Leader, Chan Zuckerberg Biohub
9:00 – 12:00 PM	Speaker 2: James Zou	Associate Professor, Stanford University
9:00 – 12:00 PM	Speaker 3: Ulugbek Kamilov	Leon and Elizabeth Janssen Associate Professor of Electrical and Computer Engineering, University of Wisconsin–Madison
12:00 – 1:00 PM	Lunch	Catered lunch and networking
1:00 – 2:30 PM	Demo / Coding Tutorial	See the Tutorial Schedule section
2:30 – 3:00 PM	Afternoon Break	Coffee, tea, juice, and light snacks
3:00 – 5:00 PM	Hackathon Track	Room 15B. Teams continue developing and iterating on multimodal 3D reconstruction pipelines
3:00 – 5:00 PM	Alternative Activity Track	Room 15A. Grant & Fellowship Writing — From Specific Aims to Storytelling, led by Jeff Gagnon
5:00 PM	Formal Program Ends	Daily sessions conclude

TIME	SESSION	DETAILS
5:30 PM	Evening Shuttle Pickup	From Seventh College – Tower West
5:50 PM	Shuttle Drop-off	San Diego Marriott La Jolla
Evening	Free Evening	No organized workshop event. Suggested informal option: sunset walk and ice cream at La Jolla beach

DAY 3 | THURSDAY, JUNE 25, 2026

TIME	SESSION	DETAILS
7:30 AM	Morning Shuttle Pickup	Pickup from San Diego Marriott La Jolla
7:50 AM	Shuttle Drop-off	Seventh College – Tower West
8:00 – 9:00 AM	Breakfast	Light breakfast and networking
9:00 – 12:00 PM	Faculty / Industry Talks + Lightning Talks	Two long-format talks followed by four participant lightning talks, 15 minutes each
9:00 – 12:00 PM	Speaker 1: David Van Valen	Assistant Professor, Division of Biology and Bioengineering, Caltech
9:00 – 12:00 PM	Speaker 2: Aaron Gilad Kusne	Staff Scientist, National Institute of Standards and Technology

TIME	SESSION	DETAILS
9:00 – 12:00 PM	Participant Lightning Talks	Four lightning talks by participants, 15 minutes each
12:00 – 1:00 PM	Lunch	Catered lunch and networking
1:00 – 2:30 PM	Demo / Coding Tutorial	See the Tutorial Schedule section
2:30 – 3:00 PM	Afternoon Break	Coffee, tea, juice, and light snacks
3:00 – 5:00 PM	Hackathon Track	Room 15B. Final hackathon development, demos, and preparation for awards
3:00 – 4:00 PM	Alternative Activity Track	Room 15A. **Building Startups in the Era of Multimodal AI** — Maya Gosztyla
4:00 – 5:00 PM	Alternative Activity Track	Room 15A. **Building Startups in the Era of Multimodal AI** — Amin Barhoush and Haider Ali
5:00 PM	Formal Program Ends	Daily sessions conclude
5:30 – 7:00 PM	Awards Ceremony & Dinner Reception	Hackathon awards ceremony, short demos, live audience voting, awards, special gifts, and closing dinner reception
7:30 PM	Evening Shuttle Pickup	From Seventh College – Tower West
7:50 PM	Shuttle Drop-off	San Diego Marriott La Jolla

Tutorial Schedule

June 23, 2026
Day 1 — Trustworthy & Interpretable AI

1:00 – 1:45 pm	**Lily Weng** | University of California San Diego *Towards Trustworthy AI: A Principled Interpretability Perspective*
1:45 – 2:30 pm	**Rohan Singh Wilkho** | Cornell University *What Are They Optimizing For? Inverse Reinforcement Learning for Inferring Hidden Objectives from Observed Decisions*

June 24, 2026
Day 2 — Multimodal & Foundation Models

1:00 – 1:45 pm	**Yueying Ni** | University of Michigan *Multimodal Learning for Galaxies: Contrastive and Generative Approaches*
1:45 – 2:30 pm	**Radha Mastandrea** | University of Chicago *ContrAst: A Factorized Approach to Finetuning Multimodal Foundational Models for Astrophysical Data*

June 25, 2026
Day 3 — ML for Physical Sciences

1:00 – 1:45 pm	**Shichuan Sun** | Nanyang Technological University *From DFT to Discovery: ML Force Fields with AI-Assisted Workflows for Materials Science*
1:45 – 2:30 pm	**Yasir Latif** | Cornell University *Machine Learning Analysis of North Atlantic Ocean Memory and Tropical Teleconnections*

Lightning Talks Schedule

June 23, 2026 Day 1 — Lightning Talks			
3:30 – 3:45 pm	**Jingjing Zou**	University of California San Diego	*Multimodal Learning for Wearable Health Data: From Raw Signals to Clinical Insight*
3:45 – 4:00 pm	**Weiwei Chen**	Cornell University	*Discover Multi-regional Neural Communication with Causal Representation Learning*
4:00 – 4:15 pm	**Xuhui Zhou**	University of California San Diego	*Neural Ensemble Kalman Filter: Data Assimilation for Compressible Flows with Shocks*
4:15 – 4:30 pm	**Xin Wei**	University of Michigan	*Unveiling the Underappreciated Consequences of Landslides across the United States with Generative AI*
4:30 – 4:45 pm	**Joseph Osumeje**	University of Michigan	*Bridging the Lithological Gap: A Foundation Model Approach to Groundwater Assessment in Northern Nigeria*
4:45 – 5:00 pm	**Yuanhang Zhang**	University of California San Diego	*Scientific Discovery as Meta-Optimization and Beyond: Towards End-to-End Auto-Research*

June 25, 2026 Day 3 — Lightning Talks			
11:00 – 11:15 am	**Ulises Rosas Puchuri**	University of California San Diego	*Non-parametric Phylogenetic Regressions via Kernels*
11:15 – 11:30 am	**Owen Leddy**	University of California San Diego	*Multi-omics Data and Sample-efficient Model Architectures Improve Prediction of Bacterial T Cell Antigens*
11:30 – 11:45 am	**Avik Biswas**	University of California San Diego / Salk	*Towards Mechanistic Forecasting of Drug Resistance in RNA Viruses*