WELCOME

Welcome to Chinese Association for Science and Technology - Los Angeles Chapter (CAST-LA) 2025 Annual Conference - Youth Research Science Expo and Artificial Intelligence (AI) Summit! We are thrilled to gather here today to celebrate decades of excellence, collaboration, and innovation within the Chinese- American scholarly and professional community.

CAST-LA is a chapter of Chinese Association for Science and Technology, USA (CAST-USA). Since its establishment in 1992, CAST-USA has remained steadfast in its commitment to fostering unity, collaboration, and communication among scholars and professionals across the United States. At CAST-USA, our mission transcends boundaries and industries, uniting over 10,000 members from diverse fields. With 16 local chapters and professional associations throughout the United States, as well as offices in global cities, we are a vast and interconnected community committed to progress and mutual understanding.

As one of the largest chapters, CAST-LA was founded in 2002 and was registered with the Secretary of State's Office in California. CAST-LA is a 501(c)3 non-political, non-profit organization. Hundreds and thousands of CAST-LA members are driving forces behind scientific research, technological advancements, and cultural preservation in Fortune 500 corporations, esteemed American companies, universities, and research institutions. They come from various fields, including pharmaceutical, medical devices, biotech, information technology, finance, law and education etc. Most of them are technical personnel such as engineers, scientists, college professors, or managers and corporate executives.

CAST-LA is not only an advocate for professional excellence but also a champion of community engagement. Our local chapters actively participate in community activities, building strong relationships with organizations in their respective areas. We understand that innovation doesn't happen in isolation; it thrives when we come together and leverage our collective strengths. Since its establishment, the CAST-LA has received support from CAST-USA, other local chapters, various technology associations, enterprises in the greater Los Angeles area, and political leaders from all walks of life. CAST-LA successfully hosted the 2005, 2014, and 2023 CAST-USA Annual Conference.

The CAST-LA 2025 annual conference and AI summit embodies our commitment to fostering intellectual growth and collaboration. We have invited renowned figures to share their expertise and insights, sparking discussions on how cutting-edge STEM research changes our life. Topics cover artificial intelligence (AI), biological science, engineering etc. As we gather here, we reaffirm our dedication to establishing connections and partnerships with other professional associations in metropolitan Los Angeles areas, promoting the free exchange of ideas and knowledge within the bounds of ethical principles and intellectual property protection.

As we embark on this exciting journey during our 2025 Annual Conference and AI Summit, we will shape the future of science, technology, culture, and education, contributing to the advancement together.

Welcome to the CAST-LA family and enjoy the conference!

One of the key missions for CAST is to foster science education and growth in the next generation. This year, CAST-LA partners with Turtle Rock Science Club to organize a Youth Science Research Expo, to celebrate curiosity, innovation, and the boundless potential of the next generation. By empowering middle and high school students to explore real-world scientific questions and present their findings to the community, we are nurturing critical thinkers and problem solvers who will help shape the future. This event serves as a platform to inspire young minds, promote scientific literacy, and foster a culture of inquiry, creativity, and collaboration.

Founded in the spring of 2022, the Turtle Rock Science Club is a student-led organization with a mission to inspire a lifelong love of science in young learners. The club is dedicated to building a strong community that supports students passionate about STEM, while preparing them to become future leaders in a science- and technology-driven world. Committed to inclusivity and accessibility, the club offers free STEM education, leadership development, and service opportunities to students and families in the local community. Since its founding, the club has provided free science classes to over 250 elementary and middle school students, led Science Olympiad training for local elementary schools, and hosted information sessions about STEM opportunities such as science fairs, science bowls, and summer camps. The club also organizes workshops and seminars featuring academic and industry experts, along with engaging and educational field trips that bring science learning to life.

At a time when science and technology play an increasingly vital role in addressing global challenges, Youth Science Research Expo encourages students to engage with the world around them and develop the skills needed to make meaningful contributions. It also brings together students, educators, families, and professionals, strengthening the bridge between education and the broader community. By investing in young scientists today, we are cultivating a more informed, innovative, and resilient society for tomorrow.

Tentative AGENDA

Irvine, CA August 23, 2025

Interdisciplinary Science and Engineering Building (ISEB) Auditorium (Room 1010)

8:00-8:40 **Check-in & Networking**

8:40-9:00 **Opening Ceremony**

Welcome Remark

a. Mrs. Haixia Gu, President of CAST-LA

b. Dr Zheng Sun, Professor of UC Irvine; Founder of Turtle Rock Science Club

Official Remarks

a. Dr. Judy Chu, US Congresswoman (invited).

b. Larry Agran, Mayor of Irvine.

c. **Jorge Herrera Avila, San Garbiel City *Councilor.***

9:00-11:30 **Keynote Speeches**

Conference Co-Chair: Dr Zheng Sun, Professor of UC Irvine Business School

Speaker 1: Vidyanand ("VC") Choudhary (9:00-9:30)

Professor of Information Systems and the Director of International Programs. He is an authority on competitive strategy for technology products and AI. His research interests are in the economics of information systems, business impact of AI and Machine Learning. He has served in a variety of other roles including Senior Associate Dean (Faculty Dean), Associate Dean of Undergraduate Programs, and Faculty Chair.

Topic: Business and AI

Speaker 2: **Li Wei**, (9:30-10:00)

Grace B. Bell Endowed Chair and Professor of Bioinformatics in the UCI School of Medicine.

Topic: Use bioinformatics algorithms to harness the full power of population-scale genomics data.

Break and refreshment (10:00-10:30)

Conference Co-Chair: Mr. Howie Yu, AM1300 broadcast program host

Speaker 3: **Thomas Hou,** (10:30-11:00)

Professor, California Institute of Technology Member,
National Academy of Sciences

Topic: Recent progress on the Clay Millennium Problem about the Navier-Stokes equations

Speaker 4: **TBD,** (11:00-11:30)

VP or above from Boeing, or Google, Microsoft, Broadcom

11:30-12:00 **Sponsor talk (for top sponsors only)**

Conference Co-Chair: Mrs. Eillen Tao, Program Director of SAP

Sponsor 1 from Company 1

Sponsor 2 from Company 2

Sponsor 3 from Company 3

12:00-13:30 **Lunch and Social Networking**

Lunch is covered. Served in the courtyard dining area.

13:30-17:00 **Special Forums & Competition**

Forum I: Youth Science Research Expo (*ISEB Auditorium, Room 1010*)

Host Chair: Dr Zheng Sun, Professor of UC Irvine; Founder and Director of Turtle Rock Science Club

13:30-14:00 Keynote speech by Dr. Yifeng Yu, Professor of UC Irvine, Department of Mathematics

Topic: The role of math education for youth science growth

14:00-15:30 Student Research Presentation

15:30-16:00 Mini Science Bowls

16:00-16:30 Award ceremony and conclude

Forum II: Advances in Artificial Intelligence Research and Applications (*ISEB Room 1200*)

Host Chair: Eileen Tao, Program Director of SAP

Co-Chair: Yu Bai, Professor of Computer Science, California State University, Fullerton

Speakers:

1. Prof. Dr. Tobias Schimmer, Head of Developer Experience at SAP
2. Dr. Wei Wu, Professor at University of Southern California
3. Yu Sun, Professor at California State Polytechnic University, Pomona, Founder of Coding Mind Academy
4. Bill Wang, Founder and CEO of Agentech Inc
5. Dr. Heidi Duan, AI Researcher at Claremont Graduate University, Founder of Growisely
6. Dr. Tingting Chen, Professor at California State Polytechnic University, Pomona

Panel Discussion II (16:00 -17:00)

Forum III: Career Development in AI Era (*ISEB Room 1310*)

Host Chair: Dr. Anna Luo,

Co-Chair: Dr. Rui Wang, Apple Engineer

Mr. David Liu, Meta Engineer

Speakers:

1. Yiming Xu, Staff Quality Engineer at Becton Dickinson (BD)
2. Cathy Peng, CEO of ROCS Global
3. Amy Jiang, Professor at University of La Verne, Founder of MIRA
4. Ethan Sun, PhD, Principal Transportation Planner, City of Riverside

Panel Discussion III (16:00 -17:00)

Daily life of working professions

Above speakers and more representatives from different career fields

Southern California Youth Research Exposition Program
Review Committee

Chair:

Zhaoxia Yu

Professor of Statistics, UCI

Committee Members:

1. Yu Bai

Associate Professor of Computer Engineering, California State University, Fullerton

2. Long Chen

Professor of Mathematics, UCI

3. Yunan Chen

Professor of Informatics, UCI

4. Wenlong Jin

Professor of Civil and Environmental Engineering, UCI

5. Shaowei Li

Assistant Professor of Chemistry and Biochemistry, UCSD

6. Xiaoyan Lu

Assistant Professor of Chemistry, Irvine Valley College

7. Ray Luo

Professor, Molecular Biology and Biochemistry, Biomedical Engineering, Chemical Engineering & Materials Science, UCI

8. Xiaoyu Shi

Assistant Professor of Developmental and Cell Biology & Chemistry, UCI

9. Yun Wang

Professor of Mechanical and Aerospace Engineering, UCI

10. Yoonjin Won

Associate Professor of Mechanical and Aerospace Engineering, UCI

11. Baolin Wu

Professor of Epidemiology & Biostatistics, UCI

12. Jing Xia

Professor of Physics & Astronomy, UCI

13. LiangZhong Xiang

Associate Professor of Radiological Sciences and Associate Professor of Biomedical Engineering, UCI

14. Xiaohui Xie

Professor of Computer Science, UCI

15. Xiangmin Xu

Professor, Anatomy & Neurobiology, UCI

16. Jin Yu

Assistant Professor of Physics & Astronomy, UCI

17. Yifeng Yu

Professor of Mathematics, UCI

18. Xiangwen Zhang

Professor of Mathematics, UCI

19. Min Zhang

Professor of Epidemiology & Biostatistics, UCI

20. Weian Zhao

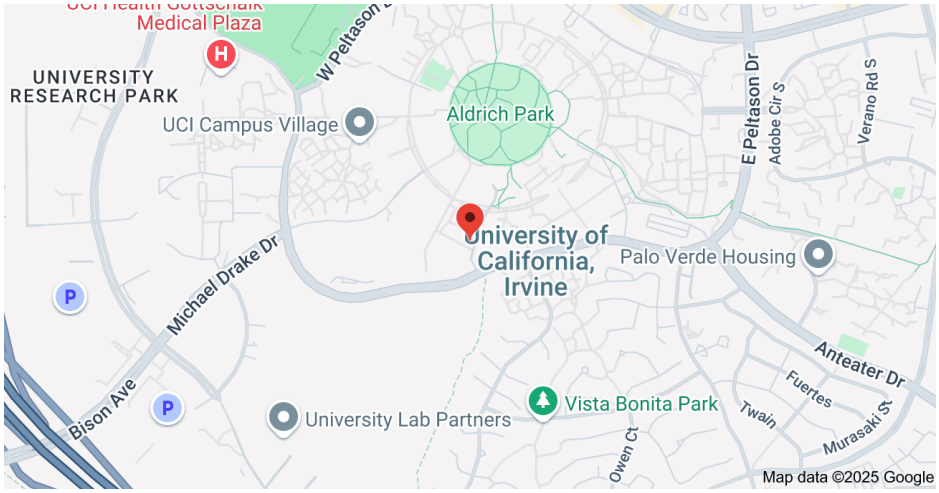
Professor, Sue and Bill Gross Stem Cell Research Center, Chao Family Comprehensive Cancer Center, Department of Biomedical Engineering, and Department of Pharmaceutical, UCI

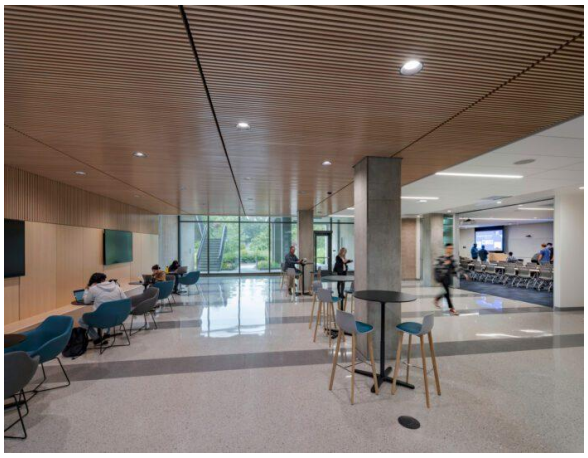
Scan To Registration

VENUES

Interdisciplinary Science and Engineering Building (ISEB)

419 S. Circle View Drive, Irvine, CA 92617

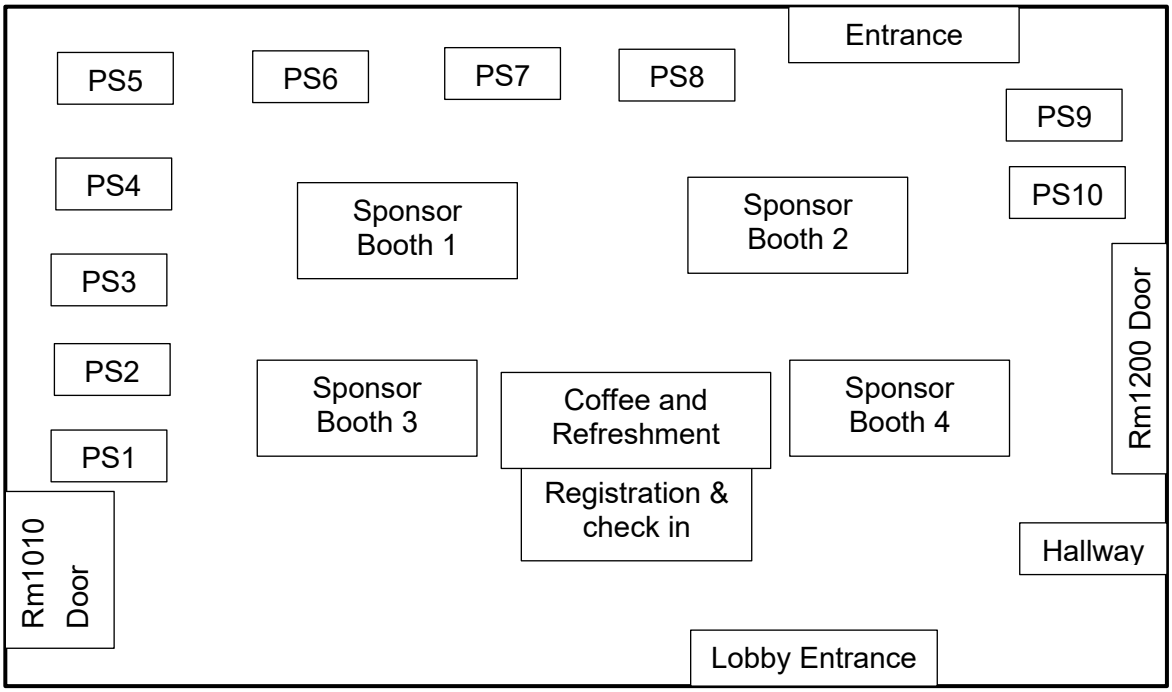




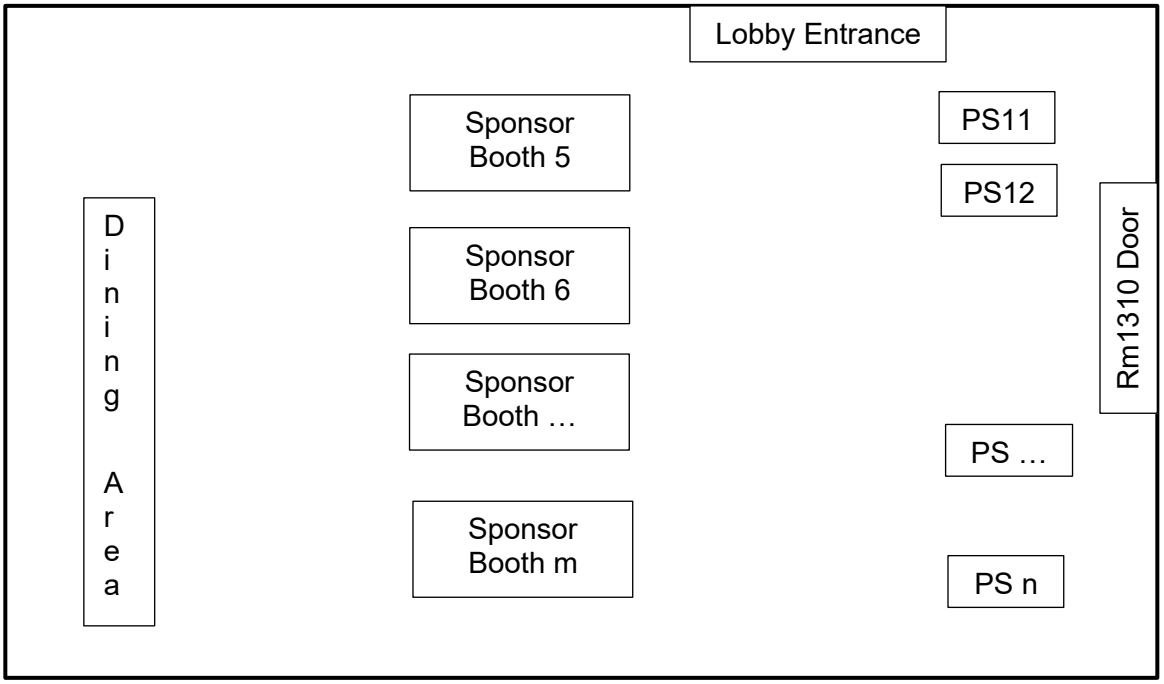
Host: CAST-LA; Co-host: Turtle Rock Science Club

Conference Layout

1. Lobby



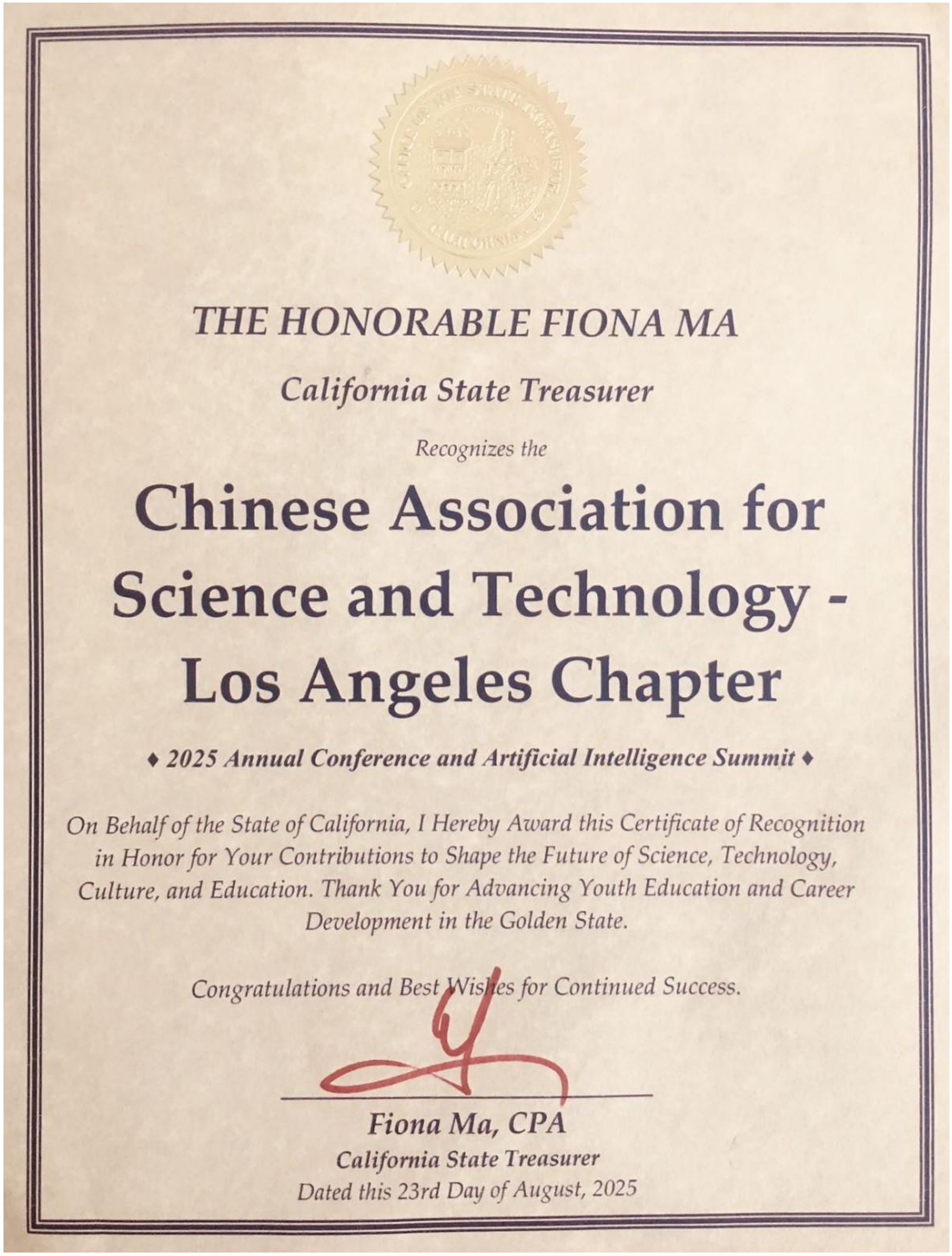
2. Courtyard



Notes:

1. PS stands for Poster; poster session time 8:00-13:30; with max number of posters 30-50?
2. Sponsor Booth: session time 8:00-17:00; with max number of sponsor booth 20?
3. Payment for the nearby parking space at P12B or P16 is required and but not covered by the event. Daily $16 for general; $20 for reserved.
4. Dressing of business or business casual is preferred.

Certification of Recognition from California State Treasurer



THE HONORABLE FIONA MA

California State Treasurer

Recognizes the

Chinese Association for Science and Technology - Los Angeles Chapter

♦ *2025 Annual Conference and Artificial Intelligence Summit* ♦

On Behalf of the State of California, I Hereby Award this Certificate of Recognition in Honor for Your Contributions to Shape the Future of Science, Technology, Culture, and Education. Thank You for Advancing Youth Education and Career Development in the Golden State.

Congratulations and Best Wishes for Continued Success.

Fiona Ma, CPA
California State Treasurer
Dated this 23rd Day of August, 2025

Conference Executive Team

1. Haixia Gu

Haixia Gu serves as the CAST-LA president since August 2024.

She has been an actuary for more than 18 years and served three Fortune 500 companies - Conseco, Sunlife and Transamerica successively. She graduated with a master's degree in actuarial science from Ball State University. She received a B.S. degree in physics from East China Normal University.

Besides her actuary career, she is active in community service. She established the first volunteer team for the youngest age group, organized and managed the volunteer team and provided one-on-one assistance to special children. Through the team, she organized one STEM and two sports (tennis and basketball) volunteer activity groups, serving neurodiversity families regularly. As a core member, she organized the 7th anniversary Peer 1 on 1 conference. With all her dedicated work, she was recognized by the California State Assembly in April 2025.

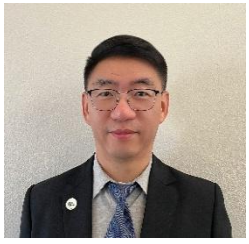
2. Zheng Sun

Professor Sun is the Founder and Director of Turtle Rock Science Club; Director of CAST-LA academy.

Professor Zheng Sun is professor of finance at the Paul Merage School of Business of University of California - Irvine. Her primary research interests are empirical investments, institutional investors, mutual funds, hedge funds, bonds and loans. Professor Sun has published extensively in leading finance and economic journals and has given many presentations and discussions at top finance and economic conferences. She has also been invited to present at various regulatory agencies including SEC, Federal Reserve Board, Federal Reserve New York, and FINRA.

Before joining the Merage School, Professor Sun received her Ph.D. degree from the Stern School of Business at New York University, a master's degree in economics from Ohio State University and a bachelor's degree in economics from Peking University.

3. Howie Yu



Howie Yu currently serves as Chairman of the Foundation of CAST-LA. He has been an active member of CAST since May 2005. He served as CAST-USA president in 2014 and CAST-LA president from 2009 to 2011.

He works as Sr. Computer System QA at B. Braun Medical Inc. He is an IT professional with over 15 years of experience in biotechnology, drug development and pharmaceutical manufacturing and a subject matter expert in Computer System Validation (CSV) and Data Integrity. In his free time, he is also the TV/broadcast program host in AM1300.

4. Eillen Tao

Eileen Tao serves as Director of CAST-LA Public Relations. She is the chair of the AI forum.

She is a Principal Program Manager at SAP Customer Experience where she oversees program delivery, technology solutions and develop program strategy to achieve long term organizational goals. Eileen Tao has over 20 years of industry experiences leading engineering and product organizations, served in various leadership roles in Idemia, Safran and Motorola.

Eileen Tao is currently serving as the board member for multiple non-profit organizations, including Code The Spectrum and California State Polytechnic University-Pomona Department of Computer Science. Eileen Tao has a bachelor's and master's degree in computer science from Bradley University and a master's degree from George Washington University.

5. Yu Bai

Professor Bai serves as Director of CAST-LA Innovation and Entrepreneurship. He is the Co-Chair of the AI forum.

Dr. Yu Bai is a leading expert in artificial intelligence and high- performance computing. He is an Associate Professor of ECE at CSU Fullerton and an adjunct professor with UC Irvine. He currently serves as the Director of the Joint Research Laboratory for Intelligent Computing. His research interests include artificial intelligence (AI), embedded hardware, neuromorphic computing, nano-scale computing system with novel silicon and post-silicon devices, and low-power digital and mixed-signal complementary metal oxide semiconductor (CMOS) circuit design. His research on artificial intelligence, in areas of application ranging from unmanned robots to improving academic performance in STEM, has been supported by grants from the Army Research Office, the National Science Foundation, and the National Academies of Sciences, Engineering, and Medicine. Dr. Bai also provides technical consultation to U.S. government agencies. He has mentored numerous talented students, with graduates now working at top tech companies like Google and Amazon, as well as prestigious academic institutions.

6. Anna Luo

Anna Luo serves as Director of CAST-LA Communications. She is the Chair of the Career Forum.

Anna Luo is a Principal with Fehr & Peers, where she oversees project delivery and leads the operations team for the Southern California region. With over 20 years of experience in the industry, she works closely with regional agencies, local cities, and private sectors to manage and deliver infrastructure projects from planning to design. Anna provides creative solutions that address the needs of her clients within challenging project constraints, and she worked with OCTA to develop the first Orange County Countywide Corridor Operations

Performance Report and worked with LA Metro on the first of its kind progressive design build project for the G Line Bus Rapid Transit, which is expected to complete in 2027 ahead of the 2028 Olympic and Paralympic games. As a recognized operations expert, Anna has published and presented a number of papers at domestic and international journals and conferences and served as the guest instructor at Cal Poly, UC Berkeley, and UCI.

As an Orange County resident, Anna is passionate about serving the communities and actively engaged with community activities and has served as an officer for various volunteering associations. She currently serves as the Transportation You Chair on the WTS Orange County Chapter Board and has led the Annual Girls Engineering Day from 2021 to 2025, providing a venue to introduce engineering and provide mentoring to more than 300 junior high and high school students.

7. Rui Wang

Dr. Rui Wang serves as Director of CAST-LA Career Development. He is the Co-Chair of the Career Forum.

Dr. Rui Wang got his bachelor's degree in mechanical engineering from Beijing Institute of Technology and PhD in Electrical Engineering from NC State University. He worked with Ford for 7 years on battery control software for hybrid/electric vehicles. He is currently a senior engineer with Apple working on battery control algorithms.

8. David (Zhiqiang) Liu

David (Zhiqiang) Liu serves as Director of CAST-LA Education. He provides IT technical support for the conference and Co-Chair of the Career Forum.

Zhiqiang Liu is a senior firmware and embedded engineer in the semiconductor and telecom industries. He used to work in Meta, Qualcomm, Apple and J2 Global Communications. He likes to study real estate, stock and investing. His hobbies include sailing, skiing, bowling ball and other sports.

9. Diana Talyor

Diana Taylor serves as Director of CAST-LA Organization, the onsite event organizer and volunteering service coordinator of the conference.

Diana Taylor has been working in the field of education for over 16 years, with a strong focus on early childhood development and autism-related behavioral therapy. She holds a Montessori teaching certification and is a Certified Positive Discipline Parent Educator, blending structured learning with respectful and compassionate guidance to support young children and their families.

Driven by her deep love for children and commitment to inclusive education, Diana founded Path of Hope Network, a nonprofit organization dedicated to supporting families of children with autism while cultivating leadership and service opportunities for youth volunteers. Through this work, she

continues to promote empathy, empowerment, and growth in the community.

10. James Tian

Jinghua Tian (James) serves as Director of CAST-LA External Relations. He is volunteering service coordinator of the conference.

Mr. Tian is a computer engineer, science writer, educator, novelist. He was one of the compliers of national adult high school physics syllabus in China.

Tian currently focuses on the research of science and technology.

11. Roger Sun

Dr. Roger Sun serves as Director of CAST-LA Daily Living. He is in charge of the conference supplies.

Dr. Roger Sun is a licensed real estate professional and a 5-star Zillow Top Agent who brings valuable experience from the industrial sector into his real estate practice. Over the years, he has developed a strong skill set through close client collaboration, leading R&D on pilot projects, and consistently delivering top-tier service. His strength in data analysis and AI adds a unique edge to his work. Beyond his professional career, Roger is also passionate about giving back—he volunteers at cultural events and takes an active role in local community initiatives. His leadership skills were honed during his time at a Fortune 500 company, where he successfully led teams, drove growth, and built strong team dynamics.

12. Wenhai Ji

Dr. Wenhai Ji serves as General Secretary of CAST-LA. He provides general support for the conference.

Dr. Wenhai Ji is an applied spectroscopist. He makes a living by studying spectroscopy and analyzing spectra. The spectral instrumentsw with his innovation have served the customers in various fields. He received his PhD in optical physics from the University of Oregon.

Officials

Larry Agran, Mayor of Irvine

Larry Agran graduated Phi Beta Kappa from the University of California at Berkeley in 1966, majoring in history and economics. In 1969, he graduated with honors from Harvard Law School, where he specialized in public interest law.

Larry has served as Legal Counsel to the California State Senate Committee on Health and Welfare. He has taught legislation and public policy at the UCLA School of Law and the Paul Merage School of Business at UC Irvine.

Larry Agran first served on the Irvine City Council from 1978 to 1990, including six years as Mayor. Under his leadership, Irvine received national recognition for its pioneering programs in child care, affordable housing, recycling, and open space preservation.

As a highly respected public interest attorney and public policy expert, Larry founded and led several non-profit organizations: the Local Elected Officials Project, the Center for Innovative Diplomacy, and CityVote. As the founder and volunteer chair of Project ’99 from 1994 to 1999, Larry was especially active in establishing the Orange County Great Park at the former Marine Corps Base at El Toro.

Larry Agran returned to service on the Irvine City Council on November 3, 1998. He was elected Mayor of Irvine in November 2000. After completing two consecutive terms as Mayor, he was elected to two consecutive terms as an Irvine City Councilmember, serving until 2014. Following a six-year hiatus, Irvine voters returned Larry Agran to the City Council in November 2020. He was re-elected to the Irvine City Council in 2022.

Determined to return good planning and good government to Irvine, Larry Agran was elected Mayor in 2024, marking his eighth nonconsecutive term in this role. Larry is also the City of Irvine representative to the National League of Cities, the League of California Cities, the California Big City Mayors Coalition, the Orange County City Selection Committee, and the Irvine Ranch Water District/City of Irvine Coordinating Committee.

Jorge Herrera Avila，City Councilor of San Garbiel

Jorge Herrera Avila is a dedicated public servant whose life and career exemplify hard work, perseverance, and leadership. With a Bachelor's degree in Political Science with an emphasis in Pre-Law from California State University, Los Angeles, Jorge has turned his passion for community service into a lifelong mission to make San Gabriel a better place for all its residents.

Jorge began working at the age of 16, building a career that reflects his dedication to service and community. He spent 15 years at SoCalGas, one of the nation's largest utility companies, where he worked in customer service. There, he developed skills in problem-solving, reliability, and collaboration—values that continue to guide him today. Later, as a Municipal Manager for the second-largest waste hauler in the United States, Jorge managed multi-million-dollar contracts and worked closely with city leaders to implement initiatives that positively impacted communities across the region.

Jorge's leadership experience includes:

- Former Commissioner, City of San Gabriel
- Community Advisory Board Member, KCET/PBS SoCal
- President, South Bay Chinese American Association
- Deputy Director, Flying Tiger Institute
- Founder, San Gabriel for Change (SG4C), a nonprofit youth leadership organization
- Honorary Community Representative for California State Treasurer Fiona Ma

Jorge is deeply committed to three key priorities: public safety, infrastructure improvement, and youth empowerment. His vision is to create a city where families feel safe, infrastructure is modern and reliable, and young people have access to opportunities that help them thrive.

Keynote Speaker

1. Dr. Vidyanand ("VC") Choudhary

Dr. Vidyanand ("VC") Choudhary is a professor of Information Systems and the Director of International Programs. He is an authority on competitive strategy for technology products and AI. His research interests are in the economics of information systems; business impact of AI and Machine Learning; Boosting creativity and innovation; use of recommender systems and search tools; impact of technology on corporate governance; marketing strategy and pricing of cloud and SaaS products; and pricing and product line design of information goods.

His research has been published in several top-tier journals including Management Science, Information Systems Research, MIS Quarterly, Production and Operations Management Journal and the Journal of Management Information Systems.

He currently teaches courses on data management, AI and machine learning, and global business strategy.

He has served in a variety of other roles including Senior Associate Dean (Faculty Dean), Associate Dean of Undergraduate Programs, and Faculty Chair.

2. Dr. Wei Li

Prof Wei Li is Grace B. Bell Endowed Chair and Professor of Bioinformatics in the UCI School of Medicine.

His research is focused on the design and application of bioinformatics algorithms to elucidate global regulatory mechanisms in normal development and diseases such as cancer. He has a solid track record in large-scale genomics data analysis and the development of widely used open-source bioinformatics software, such as MACS (>9,000 citations) for ChIP-seq and RSeqQC (>1,200 citations) for RNA-seq. In collaboration with experimental biologists, we have used bioinformatics to gain novel biological insights into development, aging, stem cell, neurologic disorders, and various cancers. His major contributions to science include the following: (1) uncovered several novel links between chromatin modifications and cancer driver gene regulation; (2) alternative polyadenylation (APA) is the first of its kind to connect APA regulation to many human complex traits and diseases. (3) cell heterogeneity in DNA methylation has now been quickly adopted in clinical trials for early cancer detection by liquid biopsy. Since establishing his own bioinformatics lab in early 2008, he has (as of 03/2021)

* Published ~160 peer-reviewed papers through solid methodology development and extensive collaboration research, including 23 senior-author papers in Nature, Cell, and Science series.

* Been well-funded with 3 R01 grants from NIH.

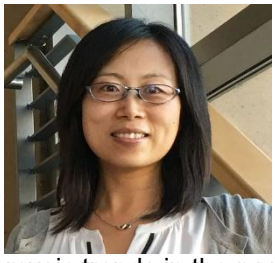
* Mentored the first 8 postdoc trainees to start their independent faculty positions.

3. Thomas Hou

Dr. Thomas Y. Hou is a leading figure in applied and computational mathematics, currently a professor at the California Institute of Technology. His research in numerical analysis and multiscale methods, particularly in fluid dynamics, has had a profound impact on both mathematics and engineering. Dr. Hou's contributions have earned him numerous prestigious honors, including election to the National Academy of Sciences and the William Benter Prize.

Southern California Youth Research Exposition Program Committee

1. **Professor Zhaoxia Yu, Committee Chair**



She is focused on statistical modeling — in particular, statistical genetics, biological imaging and bioinformatics. Her main research interest is methodological development to address statistical challenges, especially when analyzing multivariate and high dimensional data collected in biological, medical, and behavioral studies. Professor Yu aims to help researchers make appropriate and better use of data and help a general audience understand and interpret statistical results. With her statistical expertise, she has collaborated with local researchers on various interesting problems, such as music trends in the past few decades and genetic impacts on blind dating.

2. **Professor Yu Bai:** Director of CAST-LA Innovation and Entrepreneurship

3. **Professor Long Chen**

He is a Professor of Mathematics at UCI. His main research interest is the theoretical analysis and practical application of Adaptive Finite Element Methods (AFEMs). The numerical experiments using FEM need high accuracy to get reliable results. However, high accuracy will increase computation effort including physical memory as well as CPU time. To speed up the simulation, AFEM is introduced to reduce the size of the computation while keeping optimal accuracy and thus now widely used in scientific computation. While these methods have been shown to be very successful, the theory ensuring the convergence of the algorithm and the advantage over non-adaptive methods is still under development. His main research goal is to investigate a more complete integration of adaptive and multilevel algorithms, in terms of algorithm design, convergence and complexity theory, and application to important problems in science and engineering.

4. **Professor Yunan Chen**

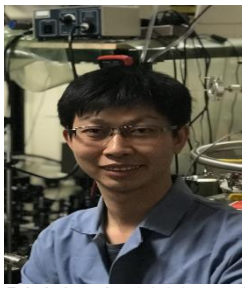
She is Professor of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine (UCI), with an adjunct appointment in the Joe C. Wen School of Population and Public Health, College of Health Sciences.

Her area of research lies at the intersection of Human–Computer Interaction (HCI), Computer Supported Cooperative Work (CSCW), and Health Informatics. She is primarily interested in studying how health information is generated, managed, shared, and utilized to drive better healthcare in both clinical and patient-oriented settings.

5. **Professor Wenlong Jin**

He is Professor of Civil and Environmental Engineering, Institute of Transportation Studies, California Institute for Telecommunications and Information Technology, UCI. His primary research interest is in modeling and control of movements of people and goods in multi-modal transportation systems as flows in different spatial-temporal domains.

6. Professor Shaowei Li

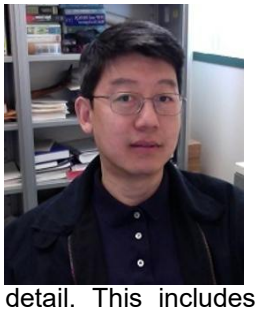


He is an Assistant Professor in the Department of Chemistry and Biochemistry at the University of California, San Diego. Professor Li's research focuses on developing advanced imaging techniques that combine laser spectroscopy with scanning tunneling microscopy (STM) to surpass the diffraction limit, enabling the exploration of nanoscale phenomena in low-dimensional quantum materials. His work encompasses ultrafast laser spectroscopy, STM, surface dynamics, and the study of strongly correlated systems. He has received several accolades, including the Hellman Fellowship from the Hellman Foundation in 2022, the Early Career Award from the AVS Nanoscale Science and Technology Division in 2020, and the Outstanding Dissertation Award from the OCPA in 2019. At UCSD, Professor Li leads the SMALL (Scanning probe Microscopy and Laser Laboratory) research group.

7. Dr. Xiaoyan Lu

She is a tenure-track chemistry professor at Irvine Valley College (IVC) in Irvine, California. She holds a Ph.D. in chemistry and has an interdisciplinary background spanning materials science, energy storage and conversion, and drug delivery research. Her research focuses on organic chemistry, nano biochemistry, and nanotechnology. In addition to her academic work, Dr. Lu actively contributes to the chemistry community through initiatives such as the National Chemistry Olympiad program and student-focused industry chemistry education.

8. Professor Ray Luo



He is a professor at the University of California, Irvine (UCI), holding appointments in the Department of Molecular Biology and Biochemistry within the School of Biological Sciences, as well as joint positions in Biomedical Engineering, Chemical and Biomolecular Engineering, and Materials Science and Engineering in the Henry Samueli School of Engineering. Professor Luo leads the Luo Lab in Biophysical Chemistry at UCI, where his research centers on computational structural biology and biophysical chemistry. His work involves developing reliable and efficient computational methods to study and predict biomolecular structures, functions, and intermolecular interactions at atomic detail. This includes computational analysis of solvation-mediated biomolecular energetics and dynamics, focusing on both polar and nonpolar interactions, which are crucial in studies of molecular recognition and applications to drug design and discovery.

9. Xiaoyu Shi

She is an Assistant Professor in the Department of Developmental and Cell Biology and the Department of Chemistry at the University of California, Irvine. Her research group uses optical and chemical approaches to develop super-resolution microscopy and spatial multiomics methods. She uses these cutting-edge technologies to study the molecular and cellular mechanisms of aging and cancers. Prior to UC Irvine, she received training in super-resolution microscopy and nonlinear optics during her postdoctoral research with Dr. Bo Huang at UCSF and her Ph.D. studies with Dr. Cheuk-Yiu Ng at UC Davis. Professor Shi is the recipient of the NIH Director's New Innovator Award (DP2), the NIH Pathway to Independence Award (K99/R00), Chan Zuckerberg Initiative Frontiers of Imaging Award, and the Hellman Fellow.

10. Professor Yun Wang

He is Professor of Mechanical and Aerospace Engineering, at UC-Irvine. Dr. Wang is interested in multi-phase multi-component transport, CFD, batteries, fuel cells, computational modeling, thermo-fluidics, and turbulent combustion. Dr. Wang's work emphasizes exploration on fundamentals of the physicochemical processes in advanced energy systems. His current research activities focus on the computational modeling and experimental diagnostics of polymer electrolyte fuel cells (PEFCs). He has proposed a comprehensive PEFC model fully coupling flow, transport, and electrochemical processes as well as including a detailed MEA (membrane electrode assembly) model. Another contribution of Dr. Wang is development of a 3D dynamic model which considers all the major transient processes occurring in a PEFC, such as gas transport, water accumulation in the membrane, and electrochemical double-layer discharge. His recent work investigated the microstructures of carbon papers and carbon clothes and proposed a structure-performance relationship of gas diffusion layers, which is one step toward developing a science-based framework for selection of materials for next-generation, high-performance gas diffusion media.

11. Professor Yoonjin Won

She is Associated Professor of Mechanical and Aerospace Enginnering at UC Irvine. Dr. Won's overarching research goal is to gain fundamental insights into nanoscale interfacial and transport physics, centering on keywords—data-driven approach, machine learning models, extreme computing, and materials design. The research efforts aim to bring transformational efficiency enhancements in energy, water, manufacturing processes, and electronics cooling by fundamentally manipulating liquid-solid-vapor interactions and transport phenomena across multiple length and time scales. Dr. Won is recognized with an NSF CAREER in 2018 and has also received several awards including the ASME EPPD Early Career Award 2018, The Emerging Innovation/Early Career Innovator of the Year 2020 from UCI Beall Innovation Center, ASME EPPD Women Engineer Award 2020, ASME ICNMM Outstanding Leadership Award 2019, UCI Samueli Career Development Fellowship, and numerous best paper and poster awards.

12. Professor Baolin Wu

He is a professor of Epidemiology & Biostatistics at UC Irvine. Prof. Wu's expertise lies in the broad area of biostatistics, bioinformatics, clinical trials, statistical genetics, genetic epidemiology, and machine learning. He has been actively collaborating with many investigators, helping them solve the scientific research questions and making translational impact. His own methodology research has motivated these collaborative projects and focused on developing novel statistical and computational methods that can more efficiently extract useful and accurate information from the vast amount of data available.

13. Professor Jing Xia

He is a Professor in the Department of Physics and Astronomy at the University of California, Irvine. Professor Xia's research focuses on quantum materials, topological phases, low-temperature physics, and the development of ultra-sensitive optical instrumentation, such as the loopless Sagnac interferometer for detecting broken time-reversal symmetry in unconventional superconductors. His work explores topological insulators, superconductors, 2D materials, and strongly correlated electron systems. Among his many honors, he is a Fellow of the American Physical Society and a recipient of the Sloan Research Fellowship, NSF CAREER Award, and the Lee-Osheroff-Richardson Prize. He is the founding Editor-in-Chief of Materials Today Quantum and previously served as Editor-in-Chief of Materials Science and Engineering B.

14. Professor Liangzhong Xiang

He is an associate professor of radiological sciences and associate professor of biomedical engineering at the University of California Irvine. Dr. Xiang's research focuses on biomedical imaging. His lab explores new ways to generate ultrasound for imaging. The TRUE lab (Theragnostic with Radiation-induced Ultrasound Emission lab) has invented or discovered X-ray-induced acoustic computed tomography (XACT), fast proton-induced acoustic imaging (PAI), and electroacoustic tomography (EAT). Broad applications include image-guided cancer treatment, bone density measurement, and brain imaging and modulation.

15. Xiaohui Xie

He is a professor in the Department of Computer Science at UC Irvine, where he has been since 2007. He received his PhD from MIT and completed his postdoctoral training at the Broad Institute of MIT and Harvard University. Professor Xie's research interests encompass artificial intelligence (AI), machine learning, deep learning, neural networks, and genomics. He has made significant contributions to the development of deep learning models for biomedical applications, including automated medical image analysis and genomic data interpretation.

16. Prof. Xiangmin Xu

He is a professor of Anatomy & Neurobiology at the University of California, Irvine. Dr. Xu's interests are in neural circuitry, which applies to understanding the neurobiology of sensory perception, learning and memory, stress, and brain diseases. Understanding how neural circuits give rise to perception, cognition, and behavior is central to understanding how the brain works. This is also key to understanding the mechanistic basis of neurological disorders. His research focuses on understanding cell-type specific cortical circuit organization and function, using combined approaches of electrophysiology, optical stimulation and imaging, molecular genetics and viral tracing. His research work has significant potential for translational applications for better treatments of neurodevelopmental disorders and neurological diseases. His recent directions include 1) using the latest single cell genomic technologies coupled with functional circuit mapping and behavioral analysis to determine how the transcriptome and epigenome shape neural circuit activity and learning and memory behaviors that change with aging and AD progression; 2) applying his findings towards treating Alzheimer's disease based on his conceptual advances in circuit manipulation-based strategies in AD animal models and using human brain tissues.

17. Professor Jin Yu

She is an assistant professor of physics & Astronomy at University of California, Irvine. Her research specializes in computational biophysics, focusing on the modeling and simulation of biomolecular systems. She employs advanced computational techniques to investigate the structural dynamics and energetics of biological macromolecules, contributing to a deeper understanding of their functions at the molecular level. Professor Yu earned both her Bachelor of Science and Master of Science degrees in Physics from Tsinghua University. She then completed her Ph.D. in Physics at the University of Illinois at Urbana-Champaign. Following her doctoral studies, she conducted postdoctoral research at the University of California, Berkeley.

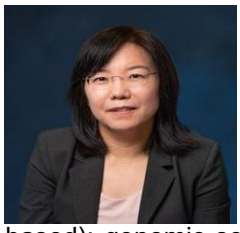
18. **Professor Yifeng Yu**

He is a professor of Mathematics at UC Irvine, where he has served since 2008. Professor Yu's research centers on nonlinear partial differential equations and their applications in science and engineering, including optimal control and combustion theory. His work has significant implications for clean energy technologies, particularly in understanding turbulent flame speeds in combustion processes. In recognition of his contributions, he was awarded the National Science Foundation CAREER Award in 2012. Beyond his research, Professor Yu is actively involved in education and mentorship. He has supervised several Ph.D. students at UC Irvine and participates in educational programs such as California MATHCOUNTS, the Irvine Area Math Modelers (IAMM), the Summer Undergraduate Research Fellowship (SURF) program, and the Freshman Seminar Program. He also co-directs the Intelligent Computing Joint Research Laboratory at UC Irvine, collaborating on interdisciplinary projects that bridge mathematics and computer science.

19. **Professor Xiangwen Zhang**

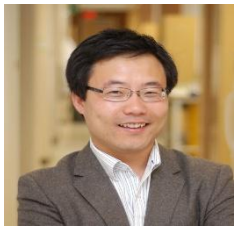
He is a professor of Mathematics at UC Irvine. Professor Zhang's research focuses on geometric analysis, particularly in geometric partial differential equations (PDEs), complex geometry, and their applications in theoretical physics. His work includes studies on geometric flows, such as the Type IIA flow, which relates to flux compactifications in Type IIA superstring theory and can be interpreted as a coupling of the Ricci flow with a scalar field. Additionally, he has contributed to generalizations of classical Minkowski formulae in Lorentzian manifolds, leading to Alexandrov-type theorems for space-like submanifolds.

20. **Professor Min Zhang**



She is a professor in the Department of Epidemiology & Biostatistics and director of Biostatistics Shared Resource of the UCI Chao Family Comprehensive Cancer Center. Her research includes statistical inference for -omics data including genomic, epigenetic, transcriptomic, proteomic, and metabolomic data (e.g., bulk and single-cell RNA-Seq, single-cell ATAC-Seq, nuclear magnetic resonance spectra data, and mass spectrometry data); statistical methods for genome-wide association studies (GWAS, both family-based and population-based); genomic selection; integrative omics data analysis; machine learning; quantitative trait loci (QTL) mapping; molecular marker profiling; statistical and computational methods for biomarker identification; transcriptome-wide gene regulatory network construction. Prior to UCI, she was at Purdue University, where she was a Professor in the Department of Statistics for nearly 20 years and the Associate Director of Data Science at the NCI-designated Purdue University Center for Cancer Research.

21. **Professor Weian Zhao**



He is Professor and entrepreneur at the Sue and Bill Gross Stem Cell Research Center, Chao Family Comprehensive Cancer Center, Department of Biomedical Engineering, and Department of Pharmaceutical Sciences at University of California, Irvine. Dr. Zhao is also a co-founder of several start-up companies that aim to develop technologies for rapid diagnosis, stem cell therapy, and drug discovery, respectively. Dr. Zhao's research aims to 1) elucidate and eventually control the fate of transplanted stem cells and immune cells to treat cancer and autoimmune diseases, and 2) develop novel miniaturized devices for early diagnosis and monitoring for conditions including sepsis, antibiotic resistance and cancer. His work has been published in many top journals such as Science Translational Medicine and Nature Biomedical Engineering. Dr. Zhao has received numerous awards including the MIT's Technology Review TR35 Award: the world's top 35 innovators under the age of 35, NIH Director's New Innovator Award, and UCI Innovator of the year.

"Artificial Intelligence Forum" Speakers and Panelists

1. Prof. Dr. Tobias Schimmer, Head of Developer Experience at SAP

Prof. Dr. Tobias Schimmer is SAP's global head of developer experience. He previously served as a chief development expert for SAP's Industry Cloud business unit and principal product manager and co-founder for SAP's Innovation Center in Newport Beach. Since joining SAP in 2009, Tobias has led various strategic initiatives in product engineering, including lean and agile software development, design thinking, and business model innovation. Tobias is also actively involved in research and teaching enterprise software engineering, holding positions at the University of Mannheim and the University of California, Irvine. Outside of work, Tobias is passionate about his family, fitness, and mentoring young talent including his own kids.

2. Dr. Wei Wu, Professor at University of Southern California

Dr. Wei Wu graduated from Peking University with a BS in Physics in 1996 and received a Ph.D. in Electrical Engineering from Princeton University in 2003. He is a Professor at the Ming Hsieh Department of Electrical and Computer Engineering, University of Southern California. Before joining USC in 2012, he had worked as a research associate, scientist, and senior scientist at HP Labs. His work includes nanoimprint lithography and applications in nano-electronics, AI accelerator circuits, nano-photonics, plasmonic, chemical sensing, and nano-electrochemical cells. He co-authored 127 peer-reviewed scientific journal papers with 12741 citations, 2 book chapters, and more than 150 conference presentations, including 16 keynote and invited presentations. He has 121 granted US patents. Half of them were also filed internationally. His H-index is 54. He is a co-editor of Applied Physics A, an associate editor of IEEE Transactions on Nanotechnology, and an associate editor of Nanomaterials. He is a Fellow of the National Academy of Inventors (NAI). He was also an IEEE Nanotechnology Council 2015 and 2016 distinguished lecturer, and a recipient of the USC Stevens Center for Innovation Commercialization Award 2020.

3. Yu Sun, Professor at California State Polytechnic University, Pomona, Founder of Coding Mind Academy

Dr. Yu Sun is a full professor in the Department of Computer Science at California State Polytechnic University, Pomona, and also holds a tenured position in the Department of Computer Science at Vanderbilt University. He is the founder of Coding Mind, a K–12 computer science education academy. Dr. Sun serves as the director of several national computing education initiatives, including the California State Certification Program for Computer Science Teachers, the NSA-sponsored Cybersecurity Training Program for Youth, the NSF-funded Broadening Participation in Computing (BPC) initiative, and Google's IgniteCS outreach program. His work focuses on advancing inclusive computing education and mentoring the next generation of innovators in AI and software engineering.

4. Bill Wang, Founder and CEO of Agentech Inc

Bill Wang is the Founder and CEO of Agentech, Inc., an AI startup based in Irvine, California, dedicated to bridging cutting-edge artificial intelligence with real-world applications. With an academic background spanning applied mathematics, data science, and computer science, he brings deep technical expertise and interdisciplinary insight into AI product design. Prior to founding Agentech, he led multiple ventures in AI education and smart agriculture, experiences that shaped Agentech's mission to deliver standardized, automated, and interpretable AI infrastructure. Under his leadership, the company's flagship product, VORLD, is setting new standards for visual AI across industries.

5. Dr. Heidi Duan, AI Researcher at Claremont Graduate University, Founder of Growisely

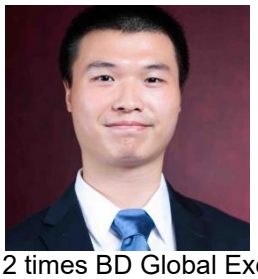
Dr. Heidi Duan is an experienced researcher in Information Systems and Technology, dedicated to advancing technology-empowered education. She holds a master's degree from Peking University and a Ph.D. from Claremont Graduate University in the United States. Her research focuses on generative AI, interdisciplinary learning, AI applications in higher education, and data-driven analysis of student learning behaviors, bridging educational theory with real-world practice to transform learning in the AI era. Before entering academia, Dr. Duan held leadership roles at leading Chinese tech companies including Sina Weibo, 360, HTC, and Alibaba, with over a decade of hands-on experience in product design, team management, and user growth. Currently, Dr. Duan conducts AI research in higher education while actively participating in public initiatives. She founded Growisely, a nonprofit educational community that connects technologists, educators, and families to promote AI-powered learning and support the growth of both parents and children.

6. Dr. Tingting Chen, Professor at California State Polytechnic University, Pomona

Dr. Tingting Chen received the PhD degree in Computer Science and Engineering from University at Buffalo State University of New York in 2011. From 2011 to 2014, she was an assistant professor in Computer Science Department at Oklahoma State University. In 2014, she joined the Department of Computer Science at California State Polytechnic University, Pomona as an assistant professor. Since 2022, she has been a professor of Computer Science at Cal Poly Pomona. Her research interests include big data security and privacy and medical informatics. She has published over 50 referred papers, including in top-tier conferences such as ACM MobiCom, IEEE INFOCOM, American Medical Informatics Association (AMIA) Annual Symposium, JMIR Medical Informatics, Journal of Medical Systems and in many IEEE or ACM Transactions. Her work has been supported by National Science Foundation, Google Inc, Microsoft Inc, US Department of Education, California State Polytechnic University, Oklahoma Center for the Advancement of Science and Technology, Amazon Inc. and Oklahoma State University.

Career Development in AI Era Forum Speakers and Panelists

1. Yiming Xu



Yiming is a Staff Quality Engineer at Becton Dickinson (BD). As an American Society of Quality (ASQ) Certified Manager of Quality/Organizational Excellence, Certified Quality Engineer, Certified Quality Auditor and Six Sigma Black Belt owner, with 10 years of working experience in the medical device industry. Yiming has achieved multiple milestones in company acquisition, due diligence, medical device design, manufacturing, quality engineering, and regulatory affairs in world-leading companies such as Medtronic Neurovascular, Edwards Lifescience,ICU Medical, Abbott Vascular and Becton Dickinson with 2 times BD Global Exceptional Impact Employee Nominaees.

As the founder of Lobart Instrument, Yiming designed and manufatured air tonometor for glaucoma patients. As the SoCal Association for Biomedical and Pharmaceutical Adavancement (SABPA) sponsorship chair, Yiming has been working to serve the Chinese community by building the bridges among the SABPA members, event speakers and Chinese American community. Yiming has also devoted himself to younger generation development by building a connection communication group between Southern California Medical Device Engineering organizations and college students for hands-on experience. As a Chinese immigrant in the US, Yiming has one goal and one goal only, to serve our Chinese American community and make it stronger.

2. Cathy Peng

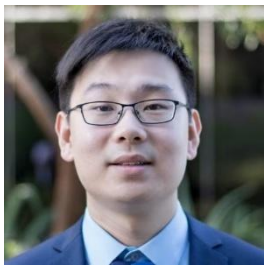
Cathy Peng is the CEO of ROCS Global, a Silicon Valley firm driving global talent recruitment and leadership development. A former Fortune 100 executive and startup leader, she also co-founded MyT. Coach, empowering professionals worldwide.

Amid the pandemic, Cathy founded the Cathy Fun Fitness Platform, a global nonprofit that has uplifted over 800,000 people through daily Zoom dance workouts—promoting wellness of body, mind, and spirit.

She has led leadership programs at top institutions including the University of Chicago, Stanford, Harvard, and Tsinghua, and brings executive experience from Asia, Europe, and North America.

An MBA from the University of Chicago and a certified life and career coach, Cathy has received numerous global awards, including “Most Inspiring Women Leader 2023” and “Top 10 Global Female CEOs 2022.” She is a proud mother of three, living in Silicon Valley.

3. Ethan Sun



Dr. Ethan Sun is the Principal Transportation Planner for the City of Riverside, where he leads multimodal planning initiatives, strategic policy development, and implementation of innovative transportation solutions. With over a decade of experience in transportation planning and engineering, Ethan specializes in travel demand forecasting, big data analytics, and performance-based planning for active transportation and freight mobility.

Prior to joining the city, Ethan held leadership roles in the private sector, where he delivered impactful projects across California involving SB 743 implementation, regional truck flow analysis, and simulation-based modeling. He is also an experienced mentor, having trained numerous professionals in travel demand models and traffic simulations.

Ethan holds a PhD in Civil Engineering from the University of California, Irvine. His work reflects a deep commitment to data-driven decision-making, sustainable infrastructure, and improving quality of life through better mobility.

4. Amy Jiang

Amy Jiang is a scholar, professor, and administrator with extensive experience in digital strategy, emerging technologies, and library information systems management. She is currently serving as the Interim Co-Dean of the Library and Learning Commons at the University of La Verne, where she leads a series of transformative initiatives to enhance the operational efficiency of the learning commons and integrate innovative technologies into higher education.

In her current position, Amy founded the university's Makerspace in 2015, creating an innovative learning environment that integrates cutting-edge tools such as 3D printers, virtual reality, machine learning, artificial intelligence, and drones into the curriculum. Amy is also the founder of the international conference MIRA (Makerspace in Academics and Research), which has been ongoing for 10 years. She interacts with the local community through camps, research training, and promotes interdisciplinary collaboration to enhance STEM (science, technology, engineering, and mathematics) education. Her research covers a variety of subjects, including emerging technologies, makerspaces, blockchain applications, and data analytics. She has also participated in several interdisciplinary projects, such as integrating active learning techniques into the development of science curricula and exploring the intersection of the humanities and STEM fields.

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