

International Conference on

Next-Generation Al & Machine Learning

November 03-06, 2025 | San Francisco, CA

Organized by



DoubleTree by Hilton
San Francisco Airport
835 Airport Blvd, Burlingame, CA





Meeting ID: Passcode:

8:00-8:50 Registrations & Badge Pickup

8:50-9:00 Opening Ceremony

Moderator: Jordan Morrow, AgileOne, Torrance, CA

Keynote Presentations

9:00-9:30 Virtual

Title to be Announced

Tuomas Sandholm, CMU and Strategy Robot, Inc. Pittsburgh, PA



Prof. Tuomas Sandholm is the Angel Jordan University Professor of Computer Science and Co-Director of CMU AI at Carnegie Mellon University, and Founder of the Electronic Marketplaces Laboratory. He holds a Ph.D. and M.S. in Computer Science and a Dipl. Eng. in Industrial Engineering and Management Science. His research spans artificial intelligence, game theory, optimization, and market design. He has published over 500 papers, holds 29 U.S. patents, and developed algorithms applied in combinatorial auctions, game-solving AI, and national kidney exchange programs. Founder of CombineNet, Strategy Robot, Strategic Machine, and Optimized Markets, he is a Fellow of ACM, AAAI, INFORMS, and AAAS, and recipient of major awards including the Vannevar Bush Faculty Fellowship and AAAI Award for AI for the Benefit of Humanity. He has an H index = 99.

9:30-10:00

Engineered Intelligence: Beyond the Bottom Line and Measuring the True Value of Al

Jordan Morrow, AgileOne, Torrance, CA



Jordan Morrow is known as the "Godfather of Data Literacy", having helped pioneer the field by building one of the world's first data literacy programs and driving thought leadership. He is also the founder and CEO of Bodhi Data. Jordan is a global trailblazer in the world of data literacy and enjoys his time traveling the world speaking and/or helping companies. He served as the Chair of the Advisory Board for The Data Literacy Project, has spoken at numerous conferences around the world, and is an active voice in the data and analytics community. He has also helped companies and organizations around the world, including the United Nations, build and understand data literacy. When not found within his work of Data, Jordan is married with 5 kids. Jordan loves fitness and the mountains, entering and racing in multiple ultra-marathons, and loves to travel with his wife and family. Jordan loves to read, often reading (or using Audible) to go through multiple books at a time. Jordan is the author of three books: Be Data Literate, Be Data Driven, and Be Data Analytical.

10:00-10:30

Prime Video: A Differentiated Viewing Experience

Gerard Medioni, Prime Video, Los Angeles, CA



Prof. Gerard G. Medioni is Vice President and Distinguished Scientist at Amazon and Emeritus Professor of Computer Science at the University of Southern California. He is recognized for pioneering contributions to computer vision, particularly in 3D sensing, surface reconstruction, and object modeling. He has authored four books, published over 280 papers, and holds 123 patents, including innovations behind Amazon's Just Walk Out technology and Amazon One. His research has advanced both theoretical foundations and real-world applications of computer vision. He is a Fellow of AAAI, IEEE, IAPR, and the National Academy of Inventors, and a member of the National Academy of Engineering. He has an H index = 92.

10:30-10:50

NETWORKING BREAK

10:50-11:20

Foundational Methods for Foundation Models for Scientific Machine Learning

Michael Mahoney, University of California, Berkeley, CA



Prof. Michael W. Mahoney is a Professor in the Department of Statistics at the University of California, Berkeley, and also affiliated with the International Computer Science Institute, where he serves as Vice President and Director of the Big Data Group. He leads the Machine Learning and Analytics Group at Lawrence Berkeley National Laboratory and is part of the RISELab in the Department of Electrical Engineering and Computer Sciences. He is also an Amazon Scholar. His research focuses on the applied mathematics of data, emphasizing algorithmic and statistical methods for large-scale problems in matrices, graphs, regression, and optimization, with applications in social networks, genetics, astronomy, and climate science. He has an H index = 92.

11:20-11:50

Learning the Dynamic World

Ming C. Lin, University of Maryland, College Park, MD



Prof. Ming C. Lin is a Distinguished University Professor of Computer Science at the University of Maryland, College Park, and former Chair and Professor at UNC Chapel Hill. She is also an Amazon Scholar under Amazon Robotics and earned her B.S., M.S., and Ph.D. in Electrical Engineering and Computer Science from the University of California, Berkeley. Her research covers Al/ML, computational robotics, physics-based modeling, virtual reality, and geometric computing. Author of over 400 publications and co-founder of Impulsonic, Inc. (acquired by Valve), she is a Fellow of the National Academy of Inventors, ACM, IEEE, Eurographics, SIGGRAPH Academy, and IEEE VR Academy. She has an H index = 104.

11:50-12:20

On Reasoning LLMs: Myths, Merits, and how to Move Forward

Dan Roth, Chief Al Scientist, Oracle and Distinguished Professor, University of Pennsylvania, Philadelphia, PA



Prof. Dan Roth is the Eduardo D. Glandt Distinguished Professor at the University of Pennsylvania and Chief AI Scientist at Oracle. Formerly VP and Distinguished Scientist at AWS AI, he led the development of Amazon's first-generation GenAI products, including Titan Models, Amazon Q, and Bedrock. His research spans natural language processing, machine learning, knowledge representation, and reasoning. He is a Fellow of AAAS, ACM, AAAI, and ACL, recipient of the IJCAI John McCarthy Award, former Editor-in-Chief of JAIR, and has been involved in multiple ML/NLP/GenAI startups. He has an H index = 110.

12:20-12:50

From Tokens to Treatments: How Agentic Al is Revolutionizing Language, Healthcare and Life Sciences

Sanjay Padhi, Tag.bio, San Francisco, CA



Dr. Sanjay Padhi is the Chief Technology Officer at Tag.bio and a Distinguished Scientist with over two decades of leadership in AI, data science, and high-performance computing across healthcare, life sciences, and government sectors. At Tag.bio, he leads the development of AI/ML and Generative AI platforms and data products. Formerly at AWS, he built large-scale AI and cloud solutions in collaboration with NSF, NIH, and DOE, driving initiatives such as CloudBank, STRIDES, and HEPCloud. He contributed to the Higgs boson discovery and quantum matter-antimatter research and led global teams at CERN, BNL, and DESY in data analytics, simulations, and quantum computing. He has served on international committees for the National Academies of Science, NSF, NIH, CERN, and the European Commission. He has an H index = 219.

12:50-13:00

ASSEMBLY PICTURE

13:00-14:00

BUFFET

Moderator: Emre Koksal, The Ohio State University, Columbus, OH

14:00-14:30

GenAl for Student Dialogs: Building Safeguards that Meet Teacher Needs

Marcia C. Linn, University of California, Berkeley, CA



Prof. Marcia C. Linn is the Evelyn Lois Corey Professor of Instructional Science at the University of California, Berkeley. A member of the National Academy of Education and Fellow of AAAS, APA, APS, and ISLS, she has served as ISLS President and in leadership roles for AAAS, NSF, and ETS. Her research advances science and technology education through technology-enhanced learning environments. She has authored several influential books, including Designing Coherent Science Education and WISE Science. She earned her Ph.D. from Stanford University under Lee Cronbach and conducted research with Jean Piaget. She has an H index = 106.

14:30-15:00

The Parallels Between Artificial and Natural Intelligence Safety

Pierre Baldi, University of California, Irvine, CA



Prof. Pierre Baldi is a researcher in AI and Machine Learning, specializing in deep learning, neural networks, reinforcement learning, and their theoretical foundations. His work focuses on applications in the natural sciences, including physics, chemistry, and biology, covering areas such as high-energy physics, quantum mechanics, drug discovery, bioinformatics, and systems biology. His research aims to advance the understanding of both natural and artificial intelligence. He has an H index = 139.

15:00-15:30

Smarter Machine Learning using Fractal and Fractional Calculi

YangQuan Chen, University of California, Merced, CA



Prof. YangQuan Chen is with the Dept. of Mechanical and Aerospace Engineering at the University of California Merced. He received his B.S. from the University of Science and Technology of Beijing, M.S. from Beijing Institute of Technology, and Ph.D. from Nanyang Technological University Singapore. His research interests include smart mechatronics for sustainability, smart control engineering via digital twins, small multi-UAV based cooperative multi-spectral "personal remote sensing", applied fractional calculus in complex system controls, modeling, signal processing, and machine learning; distributed measurement and control of distributed parameter systems with mobile actuator and sensor networks. He authored many papers, editorials, patents, research monographs and textbooks. His Google Scholar H index = 105. His latest books with CRC Press are "Fractional Calculus for Skeptics (I), (II)".

15:30-16:00

Signal Processing for Al

Gunnar Carlsson, Stanford University, Stanford, CA



Prof. Gunnar Carlsson is a mathematician and co-founder of Ayasdi, specializing in applied algebraic topology, big data, and Al. He received his Ph.D. from Stanford University under R. J. Milgram and has held professorships at UC San Diego, Princeton, and Stanford, where he also chaired the Mathematics Department. His research contributions include algebraic topology, equivariant stable homotopy theory, and algebraic K-theory. He is a Fellow of the American Mathematical Society and has delivered plenary and invited talks at major mathematical conferences. He has an H index = 56.

16:00-16:30 Virtual Bespoke Labs and our Approach for Data Curation and Custom Agents.

Alexandros G. Dimakis, University of California, Berkeley, CA



Prof. Alexandros G. Dimakis is a Professor in UC Berkeley in the EECS department as well as co-founder and CSO of Bespoke Labs. He received his Ph.D. from UC Berkeley and a Diploma degree from NTU, Athens, Greece. He has published over 150 papers and received awards including the James Massey Award, NSF CAREER Award, Google Research Award, and the UC Berkeley Eli Jury Dissertation Award. An IEEE Fellow, he has served as Associate Editor for multiple journals, Area Chair for major ML conferences, and Chair of the Technical Committee for MLSys 2021. His research focuses on generative AI, information theory, and machine learning. He has an H index = 74.

Special Talk

Xia Ning, The Ohio State University, Columbus, OH Generative and Agentic Al for Drug Discovery

16:30-16:45

Poster & Drinks 16:45-17:45

P-01 Amay Arora, The George Washington University, Washington, D.C. SCORE: SMART Cities' Organization of Readiness Evaluation through Al-driven Urban Planning

P-02 Nathaniel Isaeff, Saint Mary's College of California, Moraga, CA
A Unified Bayesian Framework for Measuring Bias in Large Language
Models

P-03 Heidi Tretheway, Sigma ai, Ridgefield, WA

Bias detection in generative AI: Practical ways to find and fix it

End of Day - 1



Meeting ID: Passcode:

Oral Presentations

Core Al Technologies	
Chair: Jyotirmoy Deshmukh, University of Southern California, Los Angeles, CA	
Padmanabhan Santhanam, IBM Research, Yorktown Heights, NY An Open-source Al Ecosystem for the Future	09:00-09:20
Mustafa Hajij, University of San Francisco, San Francisco, CA Topological Deep Learning: Frontiers and Applications	09:20-09:40
Vilma Luoma-Aho, University of Jyvaskyla, Finland Darker Side of Al: Communication Hijackings on Different Digital Arenas	09:40-10:00
Jyotirmoy Deshmukh, University of Southern California, Los Angeles, CA Neuro-symbolic Methods for Safe Al-based Autonomy	10:00-10:20
NETWORKING BREAK	10:20-10:40
Saerom Park, UNIST, South Korea Toward End-to-end Secure Al Inference: HE-enabled Embedding and Top-k Layers	10:40-11:00
Karanbir Singh, Salesforce, San Fracisco, CA Designing Responsible Al Systems with Agent-based Architectures	11:00-11:20
Amit Dhanda, Amazon, Redmond, WA LLMs in the Wild: A Framework for Responsible Al Deployment	11:20-11:40
Salem Al Agtash, Santa Clara University, Santa Clara, CA Al Agents for Microgrids	11:40-12:00
Giselle Fernandez-Godino, Lawrence Livermore National Laboratory Livermore, CA Integrated LLM-based Job Manager Agent for Design Optimization	12:00-12:20
BUFFET	12:20-13:20
Machine Learning and Data Science	
Chair: To be Announced	
Samuel Friedman, Redshred, Baltimore, MD Combining Computer Vision and Natural Language Processing for Document Understanding with Redshred	13:20-13:40
Joseph Jay Williams, University of Toronto, Canada Designing Intelligent Interventions: Augmenting Interfaces to LLMs & Adaptive A/B Experimentation	13:40-14:00
Armin Schwartzman, University of California, San Diego, CA A Large-scale Analysis of Mountain Glacier Shrinkage using Convolutional Neural Networks	14:00-14:20
Felix Abramovich, Tel Aviv University, Israel On the Statistical Theory of Sparse Linear Multiclass Supervised Learning in High Dimensions	14:20-14:40
Heidi Tretheway, Sigma Al, Ridgefield, WA Why Generative Al needs Editors, not just Engineers: Teaching Narrative Logic via Human Annotation	14:40-15:00

Jiaqi Li, The University of Chicago, Chicago, IL Asymptotics of Stochastic Gradient Descent with Dropout Regularization in Linear Models	15:00-15:20
Soumik Dey, eBay Inc, San Jose, CA To Judge or not to Judge: Using LLM Judgements for Advertiser Keyphrase Recommendations	15:20-15:40
NETWORKING BREAK	15:40-16:00
Sung Ju Hwang, KAIST, DeepAuto, South Korea Title to be Announced	16:00-16:20
Bernie Wang, AWS, Los Altos, CA AutoGluon: AutoML with Foundational Models and LLm Agents	16:20-16:40
Mohammad Mohammadi Amiri, Rensselaer Polytechnic Institute, Troy, NY Title to be Announced	16:40-17:00
Faisal Ahmed, Embry Riddle Aeronautical, Prescott, AZ Topo-CNN: Retinal Image Analysis with Topological Deep Learning	17:00-17:20

End of Parallel Session - 1

Generative & Foundation Models



NOVEMBER 04, 2025 | Tuesday IN-PERSON

Join Zoom Meeting:

Meeting ID: Passcode:

Chair: Huixin Zhan, Cedars-Sinai Medical Center, Los Angeles, CA	
Lee Wooldridge, University of Central Florida, Orlando, FL Hyper-integrated Artificial Intelligence	09:00-09:20
Emre Koksal, The Ohio State University, Columbus, OH Al-amplified Cyber Risks: Foundations and Solutions	09:20-09:40
Cosimo Spera, Minerva CQ, Sunnyvale, CA Redefining CX with Agentic AI: Minerva CQ Case Study	09:40-10:00
Anshu Saxena Arora, University of the District of Columbia, Washington, D.C. Amit Arora, University of the District of Columbia, Washington, D.C. Demystifying Artificial Intelligence (AI) Policy Across the United States, China, and the European Union: Future of Al Global Governance Landscape	10:00-10:20
NETWORKING BREAK	10:20-10:40
Amit Dhurandhar, IBM Corporation, Yorktown Heights, NY CoFrNets: From Classification to Generation	10:40-11:00
Harsha Kokel, IBM Research, San Jose, CA How can we use LLMs for planning?	11:00-11:20
Huixin Zhan, Cedars-Sinai Medical Center, Los Angeles, CA Fine-tuning Large Language Models for Genomic Intelligence	11:20-11:40
Tracy McSheery, PhaseSpace, Inc., San Leandro, CA The 80/20 Rule for Scalable Robotics: How Human Teleoperation Becomes Al Training	11:40-12:00
Bhaskara Rallabandi, Invences Inc., Dallas, TX Agentic AI for Network Observability and Autonomy: Enabling Self- Optimizing 6G Systems	12:00-12:20
NV+ AL-2025 NOVENDED 02-06 2025 CAN EDANCISCO CA LUVEDID	

BUFFET	12:20-13:20
Chair: Babak Esmaeli-Azad, CellCureRx, Inc., San Diego, CA	
Baturalp Buyukates, University of Birmingham, UK Towards Trustworthy Language Models: Token-based Uncertainty Estimation and Beyond	13:20-13:40
Wenbo Guo, University of California, Santa Barbara, CA LLM Reasoning and Agents in Security Applications	13:40-14:00
Tetsuya Shimamura, Saitama University, Japan Emotion Recognition from Brain Signals	14:00-14:20
Sangdon Park, POSTECH, South Korea Al Alignment and Crypto	14:20-14:40
Chris Gregg, Stanford University, Stanford, CA Al in Computer Science Education: Boon, Bane, or Both?	14:40-15:00
Elizabeth Ondula, Winthrop University, Rock Hill, SC Evaluating Al Model Decisions in Dynamic Environments	15:00-15:20
Babak Esmaeli-Azad, CellCureRx, Inc., San Diego, CA AI + CIPSC: A New Paradigm in Phenotypic Drug Discovery for Rejuvenation	15:20-15:40
Dhabaleswar Panda, The Ohio State University, Columbus, OH ICICLE: Intelligent Cyberinfrastructure for Next-generation Al Applications using Computing Continuum	15:40-16:00

End of Day 2 Parallel Session - 2



Meeting ID: Passcode:

Al Applications, Al in Specialized Domains	
Chair: Arpan Kusari, University of Michigan, Ann Arbor, MI	
Arunasri Nishtala, GSRS, Poolesville, MD From Regulation to Insight: Unlocking Drug Knowledge from Labeling XML Parsing for Robust, Accurate Al Databases	09:00-09:20
Aladin Djuhera, Technical University Munich, Germany Advances in LLM Post-training: The Role of High-quality Data Curation Recipes	09:20-09:40
Michael McKerns, The UQ Foundation, Wilmington, DE Title to be Announced	09:40-10:00
Anna Farzindar, Loyola Marymount University, Los Angeles, CA Agentic AI for Compositional Analysis in Art and Graphic Design with Human-in-the-loop	10:00-10:20
NETWORKING BREAK	10:20-10:40
Arpan Kusari, University of Michigan, Ann Arbor, MI Benchmarking and Breaking Context Bias in Domain Adaptation for Object Detection	10:40-11:00
Kexin Chen, The Chinese University of Hong Kong, Hong Kong KnowGuard: Knowledge-driven Abstention for Multi-round Clinical Reasoning	11:00-11:20
Patrick Ables, US Army Engineer Research and Development Center, Vicksburg, MS Closing the Loop: Real-Time Additive Manufacturing Correction with GNNs	11:20-11:40
Lacey Duckworth-Williams, US Army Engineer Research and Development Center, Vicksburg, MS Using Generative AI in Construction Engineering to Automate, Validate and Improve Efficiency in the Design Process	11:40-12:00
Flash Talks	
Yayun Tan, California Polytechnic State University, San Luis Obispo, CA Emmanuel Delgado, California Polytechnic State University, San Luis Obispo, CA Al-powered Search and Rescue: An Agentic System Utilizing Knowledge Graphs and LLMs	12:00-12:15
Isaac Nealey, University of California, San Diego, CA Principles to Practice: Al-readiness for Spatiotemporal Knowledge	12:15-12:30
Buffet & Departures	12:30

End of Day-3 | In-Person



Meeting ID: Passcode:

Keynote Presentations

Chair: To be Announced

14:00-14:30

Convergence of AI, Quantum and Classical Computing: Current Status and Future Outlook

Jean-Pierre Auffret, George Mason University, Fairfax, VA



Dr. J.P. Auffret is Director of Research Partnerships in the Costello College of Business and Director of the Center for Assurance Research and Engineering in the College of Engineering and Computing at George Mason University, USA. He is also Co-founder and President of the International Academy of CIO (IAC), Tokyo, which promotes CIO leadership education and the use of emerging technologies to address global challenges. His work focuses on CIO and ICT governance, cybersecurity leadership, and digital innovation, with collaborations involving APEC, NSF, the U.S. Department of State, World Bank, ITU, and IBM. Dr. Auffret previously held executive roles at MCI and Concert, and academic appointments at George Mason, Duke University, and UNU-eGOV. He holds a Ph.D. in Physics from American University.

14:30-15:00

Personalized Medicine and Context-sensitive Agency: Foundations and Frontiers

Judea Pearl, University of California, Los Angeles, CA



Prof. Judea Pearl is a Professor of Computer Science and Statistics at UCLA. He received his B.S. from the Technion, Israel, and his Ph.D. in Electrical Engineering from the Polytechnic Institute of Brooklyn. A member of the U.S. National Academy of Sciences and Engineering and a Fellow of IEEE, AAAI, ACM, ASA, and the Royal Society (FRS), he is renowned for his pioneering work in artificial intelligence and causal reasoning. His seminal books include Probabilistic Reasoning in Intelligent Systems, Causality, and The Book of Why. His honors include the ACM A.M. Turing Award (2012) and the BBVA Frontiers of Knowledge Award (2022). He has an H index = 127.

Al Applications, Al in Specialized Domains

Mia Yaqin Wang, College of Charleston, Charleston, SC From Signals to Systems: Real-world Al Applications in Drone Perception and Autonomy	15:00-15:20
Qian Zhang, College of Charleston, Charleston, SC Title to be Announced	15:20-15:40
Shikharesh Majumdar, Carleton University, Canada	15:40-16:00

Applying Al and Parallel Processing for Aiding Aging Adults with Memory Issues

BREAK	16:00-16:10
Chair: To be Announced	
Ananya Joshi, Johns Hopkins University, Baltimore, MD Title to be Announced	16:10-16:30
Fei Miao, University of connecticut, Storrs, CT Uncertainty Quantification and Robust Multi-agent Reinforcement Learning for Embodied AI	16:30-16:50
Jessie Walker, Texas State University, San Marcos, TX Mycelium-inspired Cybersecurity: Decentralized Intelligence for Adaptive Threat Defense	16:50-17:10
Stephan Chalup, The University of Newcastle, Australia Topology Type Estimation Using Neural Networks	17:10-17:30
Kaoru Sumi, Future University Hakodate, Japan Designing Next-generation Al Interaction Based on Emotional Understanding: Toward an Equal Relationship between Humans and Artifacts	17:30-17:50
Qizhou Wang, Hong Kong Baptist University, Hong Kong LLM Unlearning: Evaluations, Methodologies, and Broader Applications	17:50-18:10
Srikant Manchiraju, Florida State University, Tallahassee, FL Al & Ethics: A Fashion Industry Perspective	18:10-18:30

End of Day-3 | Virtual



Meeting ID: Passcode:

Keynote Presentations

Chair: To be Announced

5:30-6:00

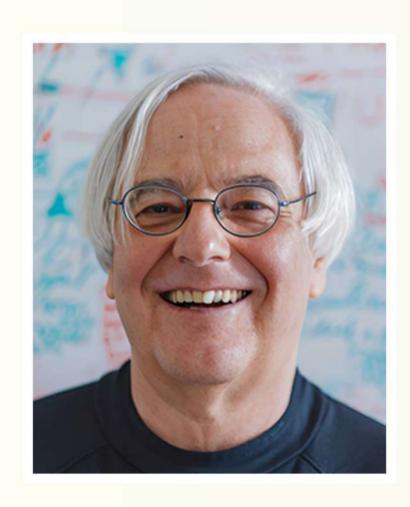
Al Ethics in Education: Confronting the Rise of "Erudite Illiterates" Fernando Moreira, Portucalense University, Portugal



Prof. Fernando Moreira is a Full Professor at Portucalense University, where he founded and led the Department of Science and Technology and established the university's first engineering degrees. He holds a Ph.D. in Electronic Engineering from the University of Porto and completed his Habilitation in 2018. His research focuses on Mobile Computing, Generative AI in Higher Education, Machine Learning, and Digital Transformation. With over 275 publications, he serves on editorial boards, organizes JCR special issues, and is active as a keynote speaker and conference chair. He is a member of ACM, IEEE, and NSTICC, and received the Atlas Elsevier Award in 2019. He has an H index = 33.

06:00-06:30

Personalized Aging Clock using Explainable Artificial Intelligence Claudio Franceschi, University of Bologna, Italy



Prof. Claudio Franceschi is a Full Professor of Immunology at the University of Bologna. Born in 1946 in Frosinone, Italy, he trained at the University of Bologna and Karolinska Institutet, Stockholm, and received multiple awards early in his career, including the Lepetit Prize and G. Petragnani Prize. His research spans experimental oncology, tumor immunology, DNA repair, and aging, and he has held professorships at the Universities of Padua, Modena, and Bologna. He served as Scientific Director of the Italian National Research Centre on Aging (INRCA) and directed the Interdepartmental Centre "L. Galvani" at the University of Bologna. He coordinated the European FP6 project "GeHA" on the Genetics of Healthy Aging. He has an H index = 155.

6:30-7:00

Recent Advances of Non-traditional Machine Learning for Industrial Al Transformation



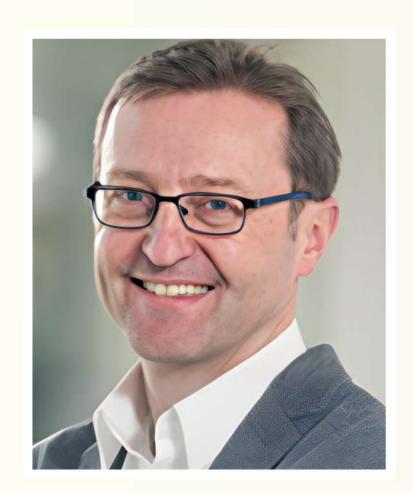


Dr. Jay Lee is the Clark Distinguished Chair Professor and Director of the Industrial AI Center at the University of Maryland, College Park. His research focuses on non-traditional machine learning and Industrial Large Knowledge Models (ILKM). A Fellow of ASME, SME, ISEAM, and the PHM Society, he previously served as an Ohio Eminent Scholar and Founding Director of the NSF IMS Center at the University of Cincinnati, and as Vice Chairman of Foxconn Technology Group. Editor-in-Chief of the IOP Journal on Machine Learning: Engineering, his honors include the SME Eli Whitney Productivity Award and recognition among the "30 Visionaries in Smart Manufacturing." He has an H index = 83.

07:00-07:30

Al for Engineering

Steffen Staab, University of Stuttgart, Germany



Prof. Steffen Staab is a Professor of Analytic Computing at the Institute for Parallel and Distributed Systems, Universität Stuttgart, and holds a Chair for Web and Computer Science at the University of Southampton. He studied Computer Science and Computational Linguistics at Universität Erlangen-Nürnberg and the University of Pennsylvania, earning his Ph.D. in 1998 and completing his habilitation in 2002. He has held positions at Universität Freiburg, Universität Stuttgart, Fraunhofer IAO, and Universität Karlsruhe (KIT), and served as Professor for Databases and Information Systems at Universität Koblenz-Landau, where he founded the Institute for Web Science and Technologies (WeST). He has an H index = 101.

07:30-8:00

When Machines Care: Next-gen Als in Digital Health Bjorn Schuller, Technical University of Munich, Germany



Prof. Bjorn Schuller is Full Professor and Head of the Chair of Health Informatics (CHI) at the Technical University of Munich and Professor of Artificial Intelligence and Head of the Group on Language, Audio, & Music (GLAM) at Imperial College London. He is also Chief Scientific Officer and Founding CEO of audEERING GmbH. A Fellow of ACM, IEEE, AAAI, BCS, IRDI, ELLIS, and ISCA, his research focuses on artificial intelligence, health informatics, and multimodal signal processing. He has an H index = 122.

Core Al Technologies Oral Talks	
Margarida Romero, Côte d'Azur University, France Reimagining Human-Al Interaction in Creative Education: From Cognitive Tool to Generative Partner	08:00-08:20
Matthias Seeger, Amazon, Germany Long Context Inference and Key-value Caching	08:20-08:40
Michael Muehlebach, MPI for Intelligent Systems Tuebingen, Germany Learning in the Presence of Dynamics and Decision-dependence: Robustness, Adaptation, and Serendipity	08:40-09:00
BREAK	09:00-09:20
Chair: To be Announced	
Elizabeth Daly, IBM Research, Ireland Risk Atlas Nexus: Building an Ecosystem for Responsible Al	09:20-09:40
Francesco Locatello, Institute of Science and Technology, Austria Discovering and Quantifying Causality in Scientific Experiments with Foundati Models	09:40-10:00 on
Peer-Benedikt Degen, University of Kassel, Germany Resurrecting Socrates in the Age of Al: Towards Meaningful, Orchestrated Al Tutors in Higher Education	10:00-10:20
Nikolaos Siafakas, University of Crete, Greece Ethics for Safe Artificial Intelligence	10:20-10:40
Adina Magda Florea, National University of Science and Technology POLITEHNICA Bucharest, Romania XAI for Reliable Interpretation of Medical Visual Data	10:40-11:00

Bedir Tekinerdogan, Wageningen University, Netherlands Smart Systems Engineering through the Synergy of Artificial Intelligence and Digital Twins	11:00-11:20
Mark Locherer, Ravensburg University of Cooperative Education, Germany Safe Al Standardization-an Analysis of ISO/IEC TR 5469	11:20-11:40
Paul Tiwald, MOSTLY AI, Austria Title to be Announced	11:40-12:00
Laixi Shi, California Institute of Technology, Pasadena, CA Title to be Announced	12:00-12:20
BREAK	12:20-12:40
Chair: To be Announced	
Raquel Iniesta, King's College London, UK Title to be Announced	12:40-13:00
Simerjot Kaur, JPMorgan Chase and Co, San Francisco, CA Title to be Announced	13:00-13:20
Mengxiao Zhang, University of Iowa, Iowa City, IA Alternating Regret for Online Convex Optimization	13:20-13:40
Kangjie Zhou, Columbia University, New York, NY Implicit Bias of Gradient Descent for Non-homogeneous Deep Networks	13:40-14:00
Massimiliano Lupo Pasini, Oak Ridge National Laboratory, Oak Ridge, TN Multi-task Parallelism for Robust Pre-training of Graph Foundation Models on Multi-source, Multi-fidelity Atomistic Modeling Data	14:00-14:20
Urbashi Mitra, University of Southern California, Los Angeles, CA Model Privacy for Federated Learning	14:20-14:40
BREAK	14:40-15:00
Srikanth Vemula, College of Saint Benedict & Saint John's University, St Joseph, MN ClarifAl: Enhancing Al Interpretability and Transparency through CaseBased Reasoning and Ontology-Driven Approach for Improved Decision Making	15:00-15:20
Yuchen Wu, Cornell University, Ithaca, NY Recent Advances in Efficient Sampling of Diffusion Models	15:20-15:40
Chulwoo Pack, South Dakota State University, Brookings, SD Toward Scalable, Sustainable, and Reliable Multimedia Content Analysis	15:40-16:00
MaryLena Bleile, Independent, New York, NY Translational Synergies in Causal Inference and Reinforcement Learning	16:00-16:20
Nhat Ho, The University of Texas, Austin Foundation of Mixture of Experts in Large-scale Machine Learning Models	16:20-16:40
BREAK	16:40-17:00
Chair: To be Announced	
Danielle Robinson, AWS, Palo Alto, CA Title to be Announced	17:00-17:20
Jungkoo Kang, IBM, Cambridge, MA Title to be Announced	17:20-17:40
Adalberto R. Sampaio, Huawei Canada Research Center, Canada The State of Autonomic Computing in Cloud Environments	17:40-18:00
Zhong Chen, Southern Illinois University, Carbondale, IL Al Predictive Models for 3D Dose Prediction in Radiotherapy: Challenges, Solutions and Opportunities	18:00-18:20

Graphical Models for Ultrahigh-dimensional and Error-prone Data

Eun-Ho Lee, Sungkyunkwan University, South Korea

18:40-19:00

Implementation of Al Models and Data for Real-time Control and Decision-making in Manufacturing Equipment

End of Day-4

Nxt Al: Translating Research into Real-World Al Solutions

Focus on applied Al

Case studies of real-world AI deployment

Talks from academia with potential real-world application

Co-presented or discussed by industry researchers

Roundtable Discussions / "Unconference" Style

University tech transfer offices, investors, startup founders, corporate R&D leads





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DoubleTree by Hilton San Francisco Hotel, Burlingame, CA





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