

Program

2nd International Conference on

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING



June 09-11, 2025, Seattle, WA

June 12, 2025, Online



DoubleTree by Hilton Hotel Seattle Airport
18740 International Blvd
Seattle, WA



Join Zoom Live Stream

<https://us06web.zoom.us/j/89201951441?pwd=o7aot3PUwUXJXnnCLwiPlOqUiYg9v7.1>

Meeting ID: 892 0195 1441

Passcode: 085599

07:30 Registrations & Badge Pick-up

08:20 Introduction

Keynote Presentations

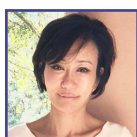
Chair: Zhong Chen, Southern Illinois University, IL, USA



08:30-09:00

Topology for AI

Gunnar Carlsson, Stanford University and BluelightAI, CA, USA



09:00-09:30

GenAI Trajectory: From Democratization to the Average Trap to Model Collapse

Ming-Hui Huang, National Taiwan University, Taiwan

Roland T. Rust, University of Maryland, MD, USA



09:30-10:00

Safe SuperIntelligence

Craig Kaplan, iQ Company, CA, USA



10:00-10:30

Do We Stand a Chance? On Rapid Advancement of Generative AI

David Doermann, University at Buffalo, NY, USA



10:30-11:00

Coffee Break & Networking

@Northwest Foyer



11:00-11:30

Death Technologies and Digital Afterlife: An Ethical Perspective

Russell W. Belk, York University, Canada



11:30-12:00

AI Agents Renaissance: Personalization, Proactivity, and Privacy

Chirag Shah, University of Washington, WA, USA

Oral Presentations

Artificial General Intelligence (AGI) | Generative AI

12:00-12:20

SensorChat: Interacting with Multimodal Sensors in Daily Life using Natural Language

Xiaofan Yu, The University of California, CA, USA

12:20-12:40

Generative AI Versus Artificial General Intelligence

Henry Hexmoor, Southern Illinois University, IL, USA

12:40-12:45

Group Photo

12:45-13:40

Lunch & Networking

@Northwest 2

13:40-14:00

How Does Critical Batch Size Scale in Pre-training?

Hanlin Zhang, Harvard University, MA, USA

- 14:00-14:20 **The AI content revolution in E-commerce: Boosting Sales, Tracking Ethics, and shaping Tomorrow's Shopping**
Adivi Madhusudan Jain, Amazon, WA, USA
- 14:20-14:40 **Evaluating a ReAct-based Agent for Agricultural Planning**
Karanbir Singh, Salesforce, San Francisco, CA

Machine Learning | Natural Language Processing

Chair: **Henry Hexmoor**, Southern Illinois University, IL, USA

- 14:40-15:00 **Prediction of Mental Health Disorder: An Identification of Precise and Reliable Machine Learning Algorithm**
Dawood Qamar, The Islamia University of Bahawalpur, Pakistan
- 15:00-15:20 **Advanced Strategies for Traffic Management and Safety in Cooperative ITS with NGSIM**
Sultan Ahmed Almalki, Najran University, Saudi Arabia
- 15:20-15:40 **Towards Interpretable, Adaptive, and Robust Online Machine Learning for Data Streams with Multiple Streaming Natures**
Zhong Chen, Southern Illinois University, IL, USA
- 15:40-16:00 **Training Strategies for Remote Sensing Object Detection**
Moongu Jeon, Gwangju Institute of Science & Technology, South Korea
- 16:00-16:20 **Concave-Regularized Neural Networks for High-dimensional Feature Selection**
Bin Luo, Kennesaw State University, GA, USA
- 16:20-16:40 **Advancing Arabic NLP: Evaluating Large Language Models for Emotion Detection in Digital Communication**
Mohammed Alshahrani, Najran University, Saudi Arabia

16:40-17:40 Poster Presentations & Networking Drinks

- P-01** **Artificial Intelligence Adoption and it's Effect on Online Retail Marketing Performance in Emerging Markets**
Takunda Victor Chivizhe, University of the Witwatersrand, South Africa
- P-02** **Application to Convolutional Neural Network for Chirality Prediction Modeling**
Seung Hwan Park, Chungnam National University, South Korea

End of Day-1

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Plenary Presentation

Chair: Jianyuan Ni, Juniata College, PA, USA



09:00-09:40

Recent Triumphs and Future Opportunities for Computer-assisted Connoisseurship of Fine Art Paintings and Drawings

David G. Stork, Stanford University, CA, USA

Keynote Presentation



09:40-10:10

Active Physical Intelligence: The First Curiosity-driven Learning Paradigm Designed for the Physical World

Tara Javidi, The University of California, CA, USA

Oral Presentations

**AI in Medicine, AI Infra, Tools & Applications | Cybersecurity | Computer Science
Artificial Neural Networks & Architecture**

Chair: Cao Thang Bui, California State University, Monterey Bay, CA, USA

10:10-10:30

Cross-Modal Knowledge Distillation for Wearable Sensor-based Human Action Recognition

Jianyuan Ni, Juniata College, PA, USA

10:30-11:00

Coffee Break & Networking

@Northwest Foyer

11:00-11:20

A Predictive Model of Anomaly Tracking for an Enterprise Monitoring System: Representation of Causal Relations in a Directed Acyclic Graph

Suhail Mahmood, Providence Health & Services, WA, USA

11:20-11:40

Machine Learning vs Traditional Statistical Methods for Predicting Postpartum Hemorrhage

Oluwafunmilola Deborah Awe, State University of Campinas, Brazil

11:40-12:00

The Application of Artificial Intelligence in Media Production: Trends, Challenges, and Future Directions

Zixuan Liang, Harrisburg University of Science and Technology, PA, USA

12:00-12:20

Lightweight and Optimized Deep Learning Architectures for Mobile Visual Computing on Edge Platforms

Yongbeom Cho, Deep ET, South Korea

12:20-12:40

Skin Lesion Classification Using Hybrid Models and Innovative Preprocessing Techniques

Shantanu Awasthi, Missouri Southern State University, MO, USA

12:40-13:40

Lunch & Networking

@Northwest 2

Keynote Presentation

Chair: Yongbeom Cho, Deep ET, South Korea



13:40-14:10

Mutual Reinforcement of LLM Dialogue Synthesis and Summarization Capabilities

Raviteja Vemulapalli, Apple, WA, USA



14:10-14:40

Generative AI in Action: Scaling Solutions Beyond the Pilot Phase

Ananya Ghosh Chowdhury, Microsoft, WA, USA

AI in Medicine | Cybersecurity | Computer Science

14:40-15:00

Enhancing Access Control Research with AI-Generated Policies

Cao Thang Bui, California State University, Monterey Bay, CA, USA

15:00-15:20

From Scan to Scam: Machine Learning for Malicious QR Code Detection Attacks

Tamirat Abegaz, University of North Georgia, GA, USA

15:20-15:40

Ensuring Translation Quality with AI LQA

Konstantinos Karageorgos, Welocalize, Greece

15:40 - 16:00

Immersive Learning in Biology Education: Enhancing Student Engagement Through AR/VR Technology

Mohammed Alqahtani, Najran University, Saudi Arabia

Coffee | End of Day-2

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Oral Presentations

AI Algorithms | Robotics | AI Infra, Tools & Applications | AI Algorithms | Robotics

Chair: Yuchen Cui, The University of California, CA, USA

- 09:00-09:20 **Explaining Model Decisions Using Decision Intelligence**
Steven Moss, Mendit.AI Inc, WA, USA
- 09:20-09:40 **The Ann Arbor Architecture for Agent-Oriented Programming**
Wei Dong, Ann Arbor Algorithms, MI, USA
- 09:40-10:00 **Interactive Robot Learning from Human Teachers**
Yuchen Cui, The University of California, CA, USA
- 10:00-10:20 **Equitable Privacy-Preserving Machine Learning Algorithms**
Selvarajah Mohanarajah, The University of North Carolina at Pembroke, NC, USA
- 10:20-10:40 **Controllable AI Through Peer-Ranked Data**
Ahmed Rashad, Perle, CA, USA
- 10:40-11:00 **But Who's Watching The Machines? Using AI To Test GenAI-Writtten Code**
Yunhao Jiao, TestSprite, WA, USA

11:00

Lunch | In-Person Departures

@Northwest 2

Virtual Sessions

11:15 **AV Check & Introduction**

Keynote Presentations

Chair: Ranita Ganguly, Delaware State University, DE, USA



11:30-12:00
OpenThinker: Post-training a Reasoning Model with Open Data
Alexandros G Dimakis, University of California, Berkeley, CA, USA



12:00-12:30
When AI Meets Power Grids: Bridging Algorithms, Uncertainty, and Decision-making
Yu Zhang, University of California, Santa Cruz, CA, USA

Oral Presentations

Machine Learning | Artificial General Intelligence | Generative AI AI in Medicine | AI Infra, Tools & Applications

- 12:30-12:50 **Context-Based Fake News Detection using Graph Based Approach : A COVID-19 Use-case**
Chandrashekar Muniyappa, Upgrade Inc., CA, USA
- 12:50-13:10 **Bridging Technology and Strategy: Advancing Digital Transformation Through Enterprise Architecture and Cloud Innovation**
Ali Asghar Mehdi Syed, IMPRIVATA, FL, USA
- 13:10-13:30 **LangFair: A Framework and Toolkit for Evaluating Bias and Fairness in Large Language Model Use Cases**
Dylan Bouchard, CVS Health, MA, USA

13:30-13:40 **Break**

Chair: Krishna Chaganti, S&P GLOBAL, FL, USA

- 13:40-14:00 **Advancing AI-Driven Healthcare and Secure Distributed Systems: Real-world Innovations in Automation, Analytics, and Diagnostics**
Varun Varma Sangaraju, Cognizant, TX, USA
- 14:00-14:20 **The Rise of Agentic AI Agents: Reshaping Industries and How**
Gautami Nadkarni, Google, NJ, USA
- 14:20-14:40 **Maximizing ROI and Sustainability in AI Infrastructure: Cost-effective, Energy-efficient Strategies for Modern Data Centers**
Prashanthi Matam, DFS Corporate Services LLC, WA, USA
- 14:40-15:00 **AI Insights and Future Trends for Mobile App Testing**
Ranita Ganguly, Delaware State University, DE, USA

End of Day-3

DAY-4 (Virtual)

Thursday, June 12, 2025
Timezone: Pacific Time

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Artificial Neural Networks & Architecture | Natural Language Processing Artificial General Intelligence (AGI) | Machine Learning & Big Data Engineering

Chair: Gautami Nadkarni, Google, NJ, USA

- 06:20-06:40 **Neurosymbolic Learning: Opportunities and Challenges**
Efthymia Tsamoura, Huawei Labs, United Kingdom
- 06:40-07:00 **WSSGCN: Wide Sub-stage Graph Convolutional Networks**
Chao Wang, China Academy of Railway Sciences Corporation Limited, China
- 07:00-07:20 **Empowering LLMs with Logical Reasoning: A Comprehensive Survey**
Fengxiang Cheng, University of Amsterdam, Netherlands
- 07:20-07:40 **Looking Beyond the Data: Navigating the Challenges of Biased Samples**
Sai Srikanth Gorthy, ByteDance (TikTok), CA, USA

07:40-07:50 Break

Keynote Presentations



07:50-08:20
Use of GenAI to Help Author Intelligent Tutoring Systems
Vincent Aleven, Carnegie Mellon University, PA, USA



08:20-08:50
Transforming Scientific Innovation with AI
Max Welling, University of Amsterdam, Netherlands

**Data Science & Big Data Engineering | AI Infra, Tools & Applications
Machine Learning | Cybersecurity | Generative AI | Cloud Automation**

Chair: Dylan Bouchard, CVS Health, MA, USA

- 08:50-09:10 **Leveraging Data Integration and Workforce Analytics to Transform Enterprise Operations**
Abdul Jabbar Mohammad, Metanoia Solutions Inc, MI, USA

09:10-09:30	Driving Enterprise Security: Leadership in Application Security, Vulnerability Management, and Secure SDLC Implementation across Global Teams Krishna Chaitanya Chaganti , S&P GLOBAL, FL, USA
09:30-09:50	Seasoned Data Analyst & Reporting Specialist Expert in Power BI, SQL, and Data Visualization Sangeeta Anand , Danville, VA, USA
09:50-10:10	Enterprise Cloud Automation: Modernizing Financial Systems with Scalable Architecture and AI Integration Balkishan Arugula , Hexaware, TX, USA
10:10-10:30	Navigating the Complex World of InfoSec: A Veteran Consultant's Journey Through Application Security, Risk, and Compliance Pavan Paidy , FINRA, WV, USA
10:30-10:50	Financial Fraud Detection with Entropy Computing Lac Nguyen , Quantum Computing Inc, NJ, USA
10:50-11:10	From Thought to Motion: Unifying Agentic 'Brains' and Physical 'Muscles' for End-to-End Embodied Intelligence Arit Kumar Bishwas , PricewaterhouseCoopers, CA, USA

Flash Talks

11:10-11:25	Context Is All You Need: Efficient Retrieval-augmented Generation for Domain-specific Artificial Intelligence Peixi Xiong , Intel Labs, OR, USA
11:25-11:40	Embodied AI Agent for Co-creation Ecosystem: Elevating Human-AI Co-creation Through Emotion Recognition and Dynamic Personality Adaptation Fernando Jia , University of California, Berkeley, CA, USA
11:40-11:55	Active Learning for Abrupt Shifts Change-point Detection via Derivative-aware Gaussian Processes Ashley Wu , Lexington High School, MA, USA
11:55-12:10	Smart Arabic Text Diacritization and Legal Liability: A Deep Learning Approach Mohammed Abu Shquier , Jerash University, Jordan
12:10-12:25	Skin Lesion Classification Using Hybrid Models and Innovative Preprocessing Techniques Shantanu Awasthi , Missouri Southern State University, MO, USA

12:25 **Concluding Remarks**

We wish to see you at

AIM-2026

April 2026 | San Francisco, CA



USG United Scientific Group

(A non-profit organization)

8105, Rasor Blvd - Suite #112, PLANO, TX 75024

Tel: +1-469-854-2280/81; **Fax:** +1-469-854-2278;

Toll free: +1-844-395-4102; **Email:** aim@uniscigroup.org

Web: <https://artificialintelligence.unitedscientificgroup.org/>