Program

International Conference on

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

📅 **June 10-12, 2024 | San Francisco, CA**
June 12-13, 2024 | Online

Timezone: Pacific Time
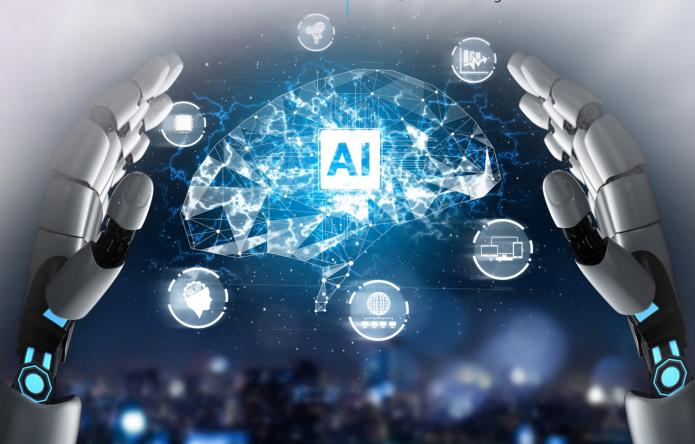
📍 **DoubleTree by Hilton**
San Francisco Airport,
835 Airport Blvd, Burlingame,
CA 94010, United States

🌐 https://artificialintelligence-conference.com/

✉ chief@artificialintelligence-conference.com

About United Scientific Group

United Scientific Group (USG) is a nonprofit organization with tax-exempt status 501(c)(3), highlighting its dedication to advancing scientific knowledge and fostering collaboration without the primary goal of making profits. USG has a proven track record of organizing scientific meetings both domestically and internationally. This experience underscores their capability to facilitate meaningful interactions among scientists, researchers, and professionals across various fields. The organization's extensive background in handling events of varying sizes and complexities further solidifies its reputation as a trusted organizer within the scientific community.

USG's contributions to the scientific community are significant, particularly through their efforts in organizing conferences and creating networking opportunities for researchers and professionals. The presence of senior scientists on their board of directors ensures that USG is well-positioned to support scientific endeavors and promote open access publications.

MEETING JOINING LINKS (LIVE STREAMING ON ZOOM PLATFORM)

Timezone: Pacific Time

As the conference is hybrid, the virtual attendees can access the in-person presentations and queries can be asked through zoom chat box.

Meeting links is for the complete meeting to join at any point of time.

Topic: International Conference on **Artificial Intelligence and Machine Learning**
JUNE 10-12, 2024 | DoubleTree by Hilton San Francisco Airport, 835 Airport Blvd, Burlingame, CA
JUNE 12-13, 2024 | Online

Meeting Joining Link: June 10-13, 2024 (In-Person and Virtual)

https://us06web.zoom.us/j/81889133286?pwd=ifkb7SZblESgZIic4eBcBIYEdS0Mxe.1
Meeting ID: 818 8913 3286
Passcode: 147235

Wi-Fi Information

Wi-Fi network: To be updated
Code: To be updated

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08:30-08:50 Registrations & Badge Pickup

08:50-09:00 Opening Ceremony

Keynote Presentations

Moderator: Xiao Chang, Tuskegee University, Tuskegee, AL

09:00-09:35 **Artificial Intelligence and Deep Learning in the Study of Fine Art Paintings and Drawings**
David G. Stork, Stanford University, Stanford, CA

09:35-10:10 **Biomimetic Human Simulation with Neuro-musculoskeletal and Neuro-visuomotor Control**
Demetri Terzopoulos, University of California, Los Angeles, CA

10:10-10:30 Break   **@ Sierra Foyer**

10:30-11:05 **Virtual: Foundational Methods for Foundational Models for Scientific Machine Learning**
Michael Mahoney, University of California, Berkeley, CA

11:05-11:40 **Autonomous Learning Agents: A Theoretical Framework**
Bing Liu, University of Illinois, Chicago, IL

11:40-12:15 **How AI is Creating a Feeling Economy**
Roland T. Rust, University of Maryland, College Park, MD
Ming-Hui Huang, National Taiwan University, Taiwan

12:15-12:25 Discussion Time   **@ Sierra B**

12:25-12:35 Group photo   **@ Sierra B**

12:35-13:35 Lunch Break   **@ Courtyard**

Chair: Rajiv Khanna, Purdue University, West Lafayette, IN

13:35-14:10 **Topological Methods for Artificial Intelligence**
Gunnar Carlsson, BluelightAI Inc., Stanford, CA

14:10-14:45 **Open Cyberinfrastructure for an Open Society**
Frank K. Wuerthwein, University of California, San Diego, CA

Oral Presentations

Data Mining & Machine Learning

14:45-15:05 **Empowering Energy Storage: AI Fusion of Vision and Language for Advanced Battery Analysis**
Daniela Ushizima, Lawrence Berkeley National Laboratory, San Francisco, CA

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15:05-15:25	**Diffusion Equation based Subspace Extraction of Image Data for Fast K-means**
	Bingcheng Li, Lockheed Martin, Owego, NY

15:25-15:45	**ℓ1,2Norm and CUR Matrix Decomposition based Sparse Online Active Learning for Data Streams**
	Zhong Chen, Southern Illinois University, Carbondale, IL

15:45-16:05	**Groundwater Level Prediction with Machine Learning**
	Xiao Chang, Tuskegee University, Tuskegee, AL

- -

16:05-16:25 Break   **@ Sierra Foyer**

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16:25-16:45	**Quantum Computing: Exploring its Business Implications and Industry Applications**
	Arit Kumar Bishwas, Price Waterhouse Coopers, Fremont, CA

16:45-17:05	**Approximating Memorization using Loss Surface Geometry for Dataset Pruning and Summarization**
	Rajiv Khanna, Purdue University, West Lafayette, IN

17:05-17:25	**Efficient and Scalable Fine-tune of Language Models for Genome Understanding**
	Huixin Zhan, Texas Tech University, Lubbock, TX

17:25-17:45	**An AI and Machine Learning Collaborative at Southeast Florida Coastal Environmental Data and Modeling Center**
	Jason Liu, Florida International University, Miami, FL

17:45-17:50	**Digital Poster:** **Multi-musical Instrument Recognition Neural Network**
	Bardia Timouri, British Columbia Institute of Technology, Canada
	Ravdeep Aulakh, British Columbia Institute of Technology, Canada
	Gathrean Dela Cruz, British Columbia Institute of Technology, Canada

Delegates

Ron Gonen, Allianz Life, Minneapolis, MN

Seung Hwang, Stanford Center at the Incheon Global Campus, Korea

Yi Li, Sanofi, Cambridge, MA

Daniel Davis, Torch Technologies, Inc., Huntsville, AL

Galina Young, Vanguard, Malvern, PA

Nashita Bhuiyan, University of Maryland, College Park, MD

Mike Mingcheng Wei, University at Buffalo, Buffalo, NY

Naveen Kumar, University of Oklahoma, Norman, OK

Caroline Bautista-Moncada, Saint Louis University, Philippines

Hwanjo Yu, Postech, South Korea

Tian Xu, Westlake University, China

David Junior Abaah, Leedsbeckett University, UK

End of Day-1

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Oral Presentations

Artificial General Intelligence Generative AI | AI Algorithms | Robotics & Mechatronics

Chair: Craig Kaplan, iQ Company, Aptos, CA

09:00-09:20	**How to Create AGI and Not Die** **Craig Kaplan**, iQ Company, Aptos, CA
09:20-09:40	**Design of Warning Messages Against Phishing Attacks: A Case for Personalized AI Enabled Warning Designs** **Joseph Aneke**, Hampton University, Hampton, VA
09:40-10:00	**Harnessing Generative AI in Supply Chains: An Application on Inventory Classification** **Carlos D. Paternina**, San Diego State University, San Diego, CA
10:00-10:20	**Innovations in the Immersive Space: Case Studies from Education and Navigation Research with Eye-tracking Analytics in Virtual Reality** **Bobby Nisha**, University of Sheffield, UK

10:20-10:40 Break	**@ Sierra Foyer**

10:40-11:00	**From Concept to Reality: Addressing Challenges and Constructing a Blueprint for Effective Generative AI Integration in Business Operations** **Giulio Marchena Sekli**, Pontifical Catholic University of Peru, Peru
11:00-11:20	**Transforming Precision Manufacturing: Unleashing AI's Potential** **Tanmay Aggarwal**, Lambda Function, San Francisco, CA
11:20-11:40	**A Tale of (at Least) Two Titles** **David Israel**, SRI Artificial Intelligence Center, Palo Alto, CA
11:40-12:00	**SMARTER Robots Engaged in Robotic Interventions for Students with Learning Disabilities** **Anshu Arora**, University of the District of Columbia, Washington, DC

AI Tools & Applications AI Infra, Tools & Applications | Cybersecurity | Data Science & Big Data Engineering

12:00-12:20	**Scaling Bitcoin: Addressing Payment Channel Network Challenges** **Hsiang-Jen Hong**, Western Washington University, Bellingham, WA
12:20-12:40	**Predicting user Engagement Toward Movie Trailers using Applications of AI Tools** **Salma Karray**, Ontario Tech University, Canada

12:40-13:40 Lunch Break	**@ Courtyard**

Chair: Mehdi Sbartai, University of Bordeaux, France

13:40-14:00	**Artificial Intelligence in Search and Rescue** **Franz Kurfess**, California Polytechnic State University, San Luis Obispo, CA
14:00-14:20	**Advancing Access Control: Exploring AI and ML Techniques for Enhanced Security** **Cao Thang Bui**, California State University, Monterey Bay, CA

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14:20-14:40	**Rapid and Scalable Classification of Viral Genomes** **Jonathan Stubblefield**, Arkansas State University, Jonesboro, AR
14:40-15:00	**Advancing AI/ML in the Water Sector; A Review of Potential uses to Leverage Existing Data** **Chris Gerrits**, Crozier Consulting Engineers, Canada
15:00-15:20	**AI Validation and Assurance and Accountability-current Legislation, Policies and Industry Practices for Scaling AI Adoption While Managing Risk** **J.P. Auffret**, George Mason University, Fairfax, VA
15:20-15:40	**AI-powered Marketing: Real-world Insights and Strategic Frameworks** **Sajjan Kanukolanu**, Position2, Santa Clara, CA
15:40-16:00	**AI Expert System using Bayesian Data Fusion for Optimal Concrete Structure Evaluation** **Mehdi Sbartai**, University of Bordeaux, France

16:00-16:20 Break   **@ Sierra Foyer**

Deep Learning & Transfer Learning

Chair: **Wei David Dai**, Purdue University, Northwest, IN

16:20-16:40	**Developing Conversational AI Agents to Enhance Academic Learning** **Sanghamitra Deb**, Chegg Inc., San Francisco, CA
16:40-17:00	**Deep Learning in Robustness** **Wei David Dai**, Purdue University, Northwest, IN
17:00-17:20	**A Novel Machine Learning Method for Gene Network Profiling and Weak Signal Detection in Prediction of Ovarian Cancer Occurrence, Survival, and Severity** **Yanming Li**, University of Kansas Medical Center, Kansas City, KS
17:20-17:40	**Detecting Transition States of Dual Mode Scramjet Data Utilizing Deep Learning Techniques** **Janett Walters Williams**, Hampton University, Hampton, VA

17:40-18:40 Posters & Drinks   **@ REDWOOD / SEQUOIA**

P-01	**Rewiring Progress: How to Unleash the Full Power of AI** **Kim Carson**, Parallax Futures, Berkeley, CA
P-02	**Deep-learning for Traffic Accident Anticipation** **Jeha Ryu**, Gwangju Institute of Science and Technology, South Korea
P-03	**Transfer Learning on Physics-informed Neural Networks for Tracking the Hemodynamics in the Evolving False Lumen of Dissected Aorta** **He Li**, University of Georgia, Athens, GA
P-04	**Supervised Machine Learning for Civil Engineering Infrastructure Maintenance** **Mehdi Sbartai**, University of Bordeaux, France
P-05	**Application of Artificial Intelligence for Predicting the Risk of Postnatal Growth Failure at 7 Days after Birth Among Very Low Birth Weight Infants** **Soonmin Lee**, Yonsei University College of Medicine, South Korea
p-06	**A Data-driven AI Approach for Seasonal-to-annual Forecasts** **Pratik Shukla**, University of Maryland, Baltimore, MD

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Quantum Computing & Virtual & Augmented Reality

Chair: Henry Hexmoor, Southern Illinois University, Carbondale, IL

09:00-09:20	**Qubit Stabilisation *via* Learning Capable Materials** **Andrei Tudor Patrascu**, FAST Foundation, Tallahassee, FL
09:20-09:40	**A Photo-realistic Virtual Platform for Versatile Robots** **Jian Zhang**, Kennesaw State University, Marietta, GA
09:40-10:00	**Enhancing Privacy in Internet of Vehicles Through Hardwareaccelerated Authentication Scheme using Physical Unclonable Function (PUF)** **Ujunwa Madububa Mbachu**, The University of Southern Mississippi, Hattiesburg, MS
10:00-10:20	**Artificial Intelligence: The Path Forward** **Henry Hexmoor**, Southern Illinois University, Carbondale, IL

10:20-10:40 Break   **@ Sierra Foyer**

10:40-11:00	**Remote Detection of Chemical Warfare Simulants using a Miniature Potentiostat** **Amer Dawoud**, University of Southern Mississippi, Hattiesburg, MS
11:00-11:20	**Voice Cloning and Text-to-speech for Dialogue in Video Games** **Dale Musser**, University of Missouri, Columbia, MO
11:20-11:40	**The 'Good, Bad and Ugly' of Algorithmic Management and the Missing Microfoundation of Micro Foundation Movement** **Shahriar Sajib**, University of Technology Sydney, Australia
11:40-12:00	**AI Evolution - Acceleration Intelligence** **James Awrach**, SeaFire Micros, Inc., Boston, MA

12:00---   Lunch & Departures   **@ Courtyard**

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Join the zoom meeting

Join the meeting by clicking on a Zoom meeting link provided by the meeting host => follow the prompts to download and run Zoom => enter the meeting ID if prompted => click to join the audio (OR) if you already have Zoom software installed in your system, simply open Zoom application, click 'join' and enter the meeting code.

Mute/unmute & audio settings

Except for the moderator and the speaker, all attendees' microphones will be muted by the host.

Chat function for Q&A

The participants will submit their questions through the chat box and the moderator/chair of the session will pick the questions for the discussion. Direct your question by tag the speakers name to the questions as you submit them to the chat (e.g., For Dr. Will Torres – Question 1).

Audience

We are anticipating over 300 attendees who will come from a range of professional backgrounds with a varied level of knowledge and expertise in technical and commercial aspects across the subject area.

For speakers

You will be allowed to share your screen during your presentation. Session moderator will pick the questions from the participants and asks the speaker depending on the time available. In case if more questions are left in the chat box, we encourage speakers to answer via chat and continue the discussion.

For poster presenters

All the poster presentation recorded videos are made available to all the participants to view at any point of time at their convenience. According to the program, the presenter will be available during the time slot for the Q&A.

Recording

The session will be recorded for training purpose and some for the video library. Most of the speakers have already consented to recording their presentation but please inform us otherwise if you have some content which should not be recorded.

If you have trouble in login or any technical issues, please write to contact@uniscigroup.net or call us at 469-854-2280.

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13:20-13:30   Opening Remarks

Keynote Presentation

Chair: Mo Zhang, Educational Testing Service, Princeton, NJ

13:30-14:05   **The "Artificial Creativity" of AI is Very Different from the "Authentic Creativity" of Humans Which is Required for Innovation**
Mark A. Runco, Southern Oregon University, Ashland, OR

Oral Presentations

Artificial Neural Networks
Artificial Neural Networks & Architecture (ANN) | Quantum Computing | Deep Learning & Transfer Learning

14:05-14:25   **Learned Features from Convolutional Neural Networks for Improved Glioma Grade Prediction**
Sreedevi Gutta, California State University, San Marcos, CA

14:25-14:45   **Contemporary Art Authentication with Large-scale Classification**
Todd Dobbs, University of North Carolina, Charlotte, NC

14:45-15:05   **Use of AI for Scoring in Educational Assessments**
Mo Zhang, **Matthew Johnson**, Educational Testing Service, Princeton, NJ

15:05-15:15   Break

Keynote Presentation

Chair: Seta Boghikian Whitby, The University of La Verne, La Verne, CA

15:15-15:50   **Contrastive Learning Models for Sentence Representations**
Haoran Xie, Lingnan University, Hong Kong

Oral Presentations

15:50-16:10   **A Comparative Assessment of Unsupervised Deep Learning Models for Detecting GPS Spoofing Attacks on Unmanned Aerial Systems**
Tala Talaei Khoei, Roux Institute at Northeastern University , Portland, ME

16:10-16:30   **Unlocking Learning Potential: Assessing the Impact of Virtual Reality on Student Performance - work in Progress**
Seta Boghikian Whitby, **Yehia Mortagy**, The University of La Verne, La Verne, CA

16:30-16:50   **Towards Knowledge Transfer Across Models in Federated Learning**
Minh N.H. Nguyen, Vietnam Korea University of Information and Communication, Vietnam

16:50-17:10   **Scalable and Efficient HD Map Production Platform based on THMA (Tencent HD Map AI System)**
Chao Zheng, Tencent, China

17:10-17:30   **Unleashing Intelligence: Exploring New Horizons for Natural and Synthetic Minds**
Danilo Vasconcellos Vargas, Kyushu University, Japan

17:30-17:50   **Probabilistic Reasoning for Sports Analytics: Decisions Beyond ChatGPT**
Jin Song Dong, National University of Singapore, Singapore

17:50-18:10   **Towards High-fidelity Text-to-3D Generation**
Yingcong Chen, HKUST(GZ), China

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Oral Presentations

AI Tools & Applications
AI Infra, Tools & Applications | Data Mining & Machine Learning Tools | Cybersecurity |
Data Science & Big Data Engineering | Artificial General Intelligence

Chair: Sie Long Kek, University Tun Hussein Onn Malaysia, Malaysia

06:00-06:20	**Vision-and-language Navigation with Open-vocabulary Detection and Structured Representation** **Yizhou Yu**, The University of Hong Kong, Hong Kong
06:20-06:40	**Prediction Simplified Model for Dynamic System Simulation** **Sie Long Kek**, University Tun Hussein Onn Malaysia, Malaysia
06:40-07:00	**Deep Learning-based Diagnostics: Analyzing Mechanical Vibrations and Human Voice for Condition Assessment** **Yong Oh Lee**, Hongik University, South Korea
07:00-07:20	**Development of an Integrated Aquatic Research Platform with Realtime Analysis Capabilities for Water Composition using Machine Learning Techniques** **Krzysztof Wolk**, ADT Group, Poland
07:20-07:40	**Role of AutoML in Business Analytics** **Muntean Mihaela**, West University of Timisoara, Romania
07:40-08:00	**Trustworthy AI to Support Reliable AI-based System Design and Deployment** **Juliette Mattioli**, Thales, France
08:00-08:20	**Forecasting the Risk in Financial Markets. AI *vs* Stochastic Processes. A Comparison** **Michele Bonollo**, Politecnico Milano, Italy
08:20-08:40	**Transforming Industries using AI: New Advancements and Tales from the Field** **Ahmed Farahat**, Hitachi America, Ltd., Santa Clara, CA

08:40-09:00 Break

Chair: Azadeh Kooshesh, Rostock University, Germany

09:00-09:20	**Building A Profitable Financial Strategy Through Forecasting of Realtime Stock Market Report Analysis** **Oluwafemi Oladapo Adeleke**, Data Science Tech Institute, France
09:20-09:40	**Advancing Signal Processing Through Transfer Learning Innovations in Health Industry** **Azadeh Kooshesh**, Rostock University, Germany
09:40-10:00	**Need of Business Domain Specific Least Cybersecurity Controls Implementation (BD-SLCCI) Framework for Small and Medium Businesses** **Shekhar Ashok Pawar**, SecureClaw Inc, Dower, DE

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10:00-10:20 **Radiomics Analysis for Bone and Soft Tissue Tumors**
Ronnie Sebro, Mayo Clinic, Jacksonville, FL

10:20-10:40 **Optimal Transport Embeddings for Machine Learning**
Gustavo K. Rohde, The University of Virginia, Charlottesville, VA

10:40-11:00 **Achieving Configuration Security Through Moving Target Defense**
Shuvalaxmi Dass, University of Louisiana at Lafayette, Lafayette, LA

11:00-11:20 **Assisting Clinical Diagnosis: Fuzzy Probability Trees, an Interpretable AI Model**
Giulia Capitoli, University of Milano-Bicocca, Italy

11:20-11:40 **AI-operated Virtual Testers-generative AI & LLM Agents Bring Ground Breaking Capabilities into the Testing World**
Tal Barmeir, CEO | BlinqIO Inc, Wilmington, DE

11:40-11:50 Break

Chair: Mo Zhang, Educational Testing Service, Princeton, NJ

11:50-12:10 **The Impact of AI on the Market to Product Feedback Loop in the Technology Industry**
Devika Naik, **Nagesh Gulkotwar**, Google, New York, NY & Plainfield, IL

12:10-12:30 **Realistic Human Avatars at Synthesia**
Vittorio Ferrari, Synthesia, Switzerland

12:30-12:50 **Immersive Learning using Metaverse: Transforming the Education Industry Through Extended Reality**
Gayathri Karthick, York St John University, UK

12:50-13:10 **Natural Language in Visual Generative Artificial Intelligence**
Peixi Xiong, Intel Labs, Hillsboro, OR

13:10-13:30 **Student Viewpoints on the use of ChatGPT in Learning Discrete Mathematics**
Wen-Jung Hsin, **Marina Perdiguero Martin**, Park University, Parkville, MO

13:30-13:50 **Building E2E Enterprise Grade Modeling Pipeline from Scratch**
Yashash Gaurav, Ripple, San Francisco, CA

13:50-14:05 **Face Expression of Personality**
Satya Naga Srikar Kodavati, University of Massachusetts, Boston, MA

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We wish to see you at
AIM-2025
June 09-11, 2025 | Seattle, WA

Organized by