

International Conference on AI and Data Science Applications and Advances (ICADAA)

Conference Programme

Venue: Emirates Aviation University, Dubai,
International Academic City

Monday 24 November 2025

08:00 - 08:30	Delegate Arrival & Registration
Venue	Auditorium
Moderator	Shereen Afana, Senior Registrar, Emirates Aviation University, UAE
08:30 - 08:35	Official Conference Inauguration by His Highness Sheikh Ahmed bin Saeed Al-Maktoum , Chairman and Chief Executive for Emirates Airline & Group
08:35 - 08:40	Opening Address by Prof. Dr. Ahmad Al Ali , Vice Chancellor – Emirates Aviation University
Keynote Speakers	
Venue	Auditorium
Moderator	Shereen Afana, Senior Registrar, Emirates Aviation University, UAE
Session Title	From Algorithms to Impact: AI, Remote Sensing and Climate-Resilient Innovation
08:40-09:05	Dr. Dirk Jungnickel - Senior Vice President, Enterprise Data & Analytics, Emirates Group, UAE <i>Beyond the Algorithm: Bridging the Gap Between AI Promise and Operational Reality</i>
09:05-09:30	Prof. Vasile Palade - Professor of AI & Data Science, Coventry University, UK Remote Sensing and Deep Learning for Farmland and Crop Classification
09:30-09:55	Alaa AlRadwan - Lab Lead, Senseable City Dubai, MIT Senseable City Lab, UAE <i>Sensing the City - Designing Cities for the Future</i>
09:55-10:20	Alya Al Mazrouei , Director of Research and Weather Enhancement Department, National Center of Meteorology, UAE <i>Driving Climate Resilience through UAE Research and Innovation: The UAERP and NCM Journey</i>
10:20- 10:35	Breakfast
Venue	Auditorium
Session Title	Data-Driven Insights into Heatwave Mortality and Climate Impacts
Session Chair	Prof. Amin Hosseinian Far, Hertfordshire University, UK
10:35-10:55	Dr. Anna Bershteyn & Dr. Alex Azan , New York University Grossman School of Medicine, USA <i>Project HEATWAVE: Advancing Climate-Health Resilience through Science, Policy and Innovation</i>
10:55-11:15	Dr. Corinne Hartin & Kelly Wanser - SilverLining, USA <i>Modelling Climate Risk and Human Health: Science and Innovation Pathways for Cooling Interventions in the UAE</i>
11:15-11:30	Dr. Robert Meade - Postdoctoral Research Fellow, Harvard T.H. Chan School of Public Health, USA <i>Thermal Physiology and Epidemiology: Towards Evidence-Based Heat Stress Thresholds</i>
11:30-11:45	Dr. Jean-François Lamarque - Head of Research, Three Cairns Group, USA <i>AI in support of quantifying impacts from climate extremes</i>
11:45-12:00	Prof. Shannon Yee - G.W.W. School of Mechanical Engineering, Georgia Institute of Technology, USA <i>Advancing Sustainable Cooling Techniques for Extreme Heat Regions</i>
12:00-12:15	Panel Discussion

12:15-13:15 Lunch & Networking**Authors' Presentations**

Venue	Auditorium	Seminar Room	Library-PhD Lab 1
Session Title	Digital Twins, Simulation & Decision Modelling	AI for Climate and Environmental Resilience	AI and Sustainability for Climate-Resilient Airports
Session Chair	Dr. YingLiang Ma, <i>University of East Anglia, UK</i>	Prof. David Chikodzi, <i>Great Zimbabwe University, Zimbabwe</i>	Dr. Omid Chatrabgoun, <i>Coventry University, UK</i>
13:15-13:35	Digital Twins and Simulation for Environmental Planning <i>Simon Grange, Safa Al Ameri, Pearl Rwauya</i>	Meteorological Drivers of Coral Bleaching Stress in the Arabian Gulf Through Explainable Machine Learning <i>Nanda Kishore Reddy Busireddy, Karunakar Reddy Mannem, Francesco Paparella, John A. Burt</i>	Multi-Pollutant Air Quality Management for Climate-Resilient Airports <i>Femina Anzil, Mostafa Kamil</i>
13:35-13:55	Data-Driven Insights into Managerial Efficiency, Hospitality Sustainability, COVID-19 Shock Resilience, and Hotel Asset Valuation <i>Peng Liu, Peihong Liu, Yilin Hong</i>	High-resolution satellite imagery and AI for monitoring protected areas: A case study of Bale Mountains National Park, Ethiopia <i>Yacob T. Tesfaldet, Nji T. Ndeh, Getachew Mulualem, Alireza Daneshkhah</i>	Adoption of AI in Sustainable Air Passenger Services: A Six Hat Approach <i>Bhavana Rajeev, Nasreen Khan, Ronak Jatin Lad</i>
13:55-14:15	Climate Change Adaptation and Mitigation Efforts at Airports Company South Africa: AI Enabled Pathways <i>Phathutshedzo Mundalamo, Kaitano Dube, Kevin Mearns</i>	AI-Enhanced Water Use Efficiency and Security Analysis for Climate Resilience in Gulf States: A Four-Decade Study <i>Mawada Tawfik, Mostafa Kamil</i>	Climate-Resilient Air Traffic Control (ATC): AI-Driven Digital Messaging for Weather-Adaptive Routing <i>Mashael Yusuf Al Shuail, Mostafa Kamil</i>
14:15-14:25	Break		
Venue	Auditorium	Seminar Room	Library-PhD Lab 1
Session Chair	Prof. Kevin Mearns, <i>University of South Africa, South Africa</i>	Prof. Vasile Palade, <i>Coventry University, UK</i>	Dr. Amanuel Kidane Andegiorgish, <i>University of Rwanda</i>
Session Title	AI for Human, Economic and Social Insights	AI for Heat, Water and Environmental Health	AI & Climate Resilience in Aviation Operations
14:25-14:45	Examination of potential role of AI in aviation sustainability <i>Kaitano Dube</i>	Predicting Heat-related Mortality Using Neural Networks in the MENA Region and the Arabian Peninsula <i>Yehya M. Elmansoury, Yacob Tesfaldet, Alireza Daneshkhah</i>	FogCast-AE: Machine Learning Nowcasting Turns Climate-Amplified Fog into Managed Risk for UAE Airports <i>Maham Salahuddin, Mostafa Kamil</i>
14:45-15:05	Application of Machine Learning Techniques for Predicting Investment Decisions from Investor	Integrative Modelling of Human Molecular Drivers and Physiological Outcomes of Heat Acclimation	AI for Climate-Resilient Skies: A Spatial-Temporal HexGrid Framework for Discovering Systemic Carbon Hotspots in

	Personality <i>Nidhi Mathur, Anshuman Mathur, Nidhi Chaturvedi</i>	<i>Nasreen Khan, Rukshanda Kamran, Mostafa Kamil, Zainab Rashid</i>	Aviation <i>Deepudev Sahadevan, Hannah Al Ali, Zindoga Mukandavire</i>
15:05-15:25	Quantifying Community Resilience and Mental Health Vulnerability After Floods: A Bayesian–Machine Learning Workflow <i>Suleiman Adamu Yakubu, Alireza Daneshkhah, Seyed Mousavi, Jonathan Eden, Judith Kabajulizi, Vasile Palade</i>	Intervention Analysis in Causal Bayesian Networks to Mitigate Mental Health Risks from Natural Disasters: Application to Flooding <i>Seyed R. Mousavi, Alireza Daneshkhah</i>	
15:30-15:45	Closing Ceremony: Prof. Hannah Al Ali, Deputy Vice Chancellor Dean Faculty of Mathematics & Data Science		
17:00-22:00	Desert Safari – Participants staying at the Premier Inn Hotel will be picked up there, while the rest will be picked up from EAU campus . Please bring your desert gear to enjoy the experience!		