



8th

INTERNATIONAL CONFERENCE ON
**DATA SCIENCE & MACHINE
LEARNING APPLICATIONS**

CONFERENCE PROGRAM

Sunday and Monday 16th-17th February, 2025



SUNDAY 16th FEBRUARY, 2025

Time		Session	Presenter	Title	Location	Session Chair
From	To					
08:30	09:30	Registration + Coffee			Building 105 - the main Hall	
VIP Welcome and Booth Visit						
Opening Session						
09:30	09:40	Opening I			Main Auditorium (Building 105)	
09:40	09:55	Opening II	Dr. Ahmed Al Yamani	Conference Opening Speech	Main Auditorium (Building 105)	
09:55	10:25	Keynote Speech (1)	Dr. Najla Altuwijri General Manager of the Public & Education Sector at SDAIA	Empowering the Future: Revolutionizing Software Engineering with AI and Data Science Innovations	Main Auditorium (Building 105)	
10:25	10:55	Keynote Speech (2)	Eng. Yehia Khoja General Director of AI & Business Development at the Ministry of Energy	AI Applications & Best Practices in Energy	Main Auditorium (Building 105)	
Keynote Speech						
10:55	11:25	Keynote Speech (3)	Mr. Abdullah Aba Hussien Director of the Future Factories Program at the Ministry of Industry & Mineral Resources	Future Factories' Role in Enhancing Artificial Intelligence's Contribution to Improving Efficiency and Productivity in the Industrial Sector	Main Auditorium (Building 105)	
11:25	11:55	Keynote Speech (4)	Prof. Yaser S. Abu-Mostafa, California Institute of Technology	State of the Art in Artificial Intelligence - What We Know and What We Don't Know	Main Auditorium (Building 105)	



11:55	13:00	Prayer and Lunch Break (Building 105- Ground Floor)				
13:00	13:45	Panel Discussion II	<ul style="list-style-type: none"> Maryam Telmesani - Vice President of Sustainability at Saudi Airlines Iftikhar Ali Alvi - Director of IT at Ministry Confidential Anas Mosa - Director of IT Projects at PIF 	Data Science for Social Good: Tackling Global Challenges	Main Auditorium (Building 105)	Moderator: Dr. Laila Dahabiyeh

1: Conference Session (1) / Parallel						
13:50	14:10	Transformative Impact of AI Across All Sectors	Sarah Alsubhi, Mashael Al-Luhaybi, Rawabi Abod, Raghad Alharbi, Ftoon Alharbi and Batool Alharbi	Personalized Healthcare: Utilizing Probabilistic Models for Disease-Drug Association and Treatment Prediction	Lecture Hall 2-C02 (Building 105)	Session 1 chair: Abeer Mirdad
14:10	14:30	Transformative Impact of AI Across All Sectors	Asmaa Alghamdi, Wajdi Aljedaani, Stephanie Ludi and Yasir Javed	Automating Accessibility Compliance: Leveraging Machine Learning to Analyze Developer Challenges with WCAG Guidelines	Lecture Hall 2-C02 (Building 105)	Session 1 chair: Abeer Mirdad
14:30	14:50	Transformative Impact of AI Across All Sectors	Sayed Ebrahim Hosseini, Shahbaz Pervez, Mazlina Abdul Majid, Nasser Abosqa and Gasim Alandjani	Forecasting New Mobile Site Location Suitability Using Machine learning	Lecture Hall 2-C02 (Building 105)	Session 1 chair: Abeer Mirdad
15:00	Asr Prayer + Break and Networking					

2: Conference Session (2) / Parallel

13:50	14:10	Autonomous Systems & Robotics	Mohamed Alkaoud	Are LLMs Good Zero-Shot Classifiers? Re-Evaluating the Performance of LLMs on Arabic Sentiment Analysis	Faculty Lounge (Building 105)	Session 2 chair Dr. Fatimah Alzamzami
14:10	14:30	Autonomous Systems & Robotics	Shafii Abdulhamid, Yousef Alsulaiti, Faisal Albishri, Sanad Al-Hadidy, Nadim Rana and Abdullah Hussein Al-Ghushami	Hybrid Feature Selection Technique for BigData Intrusion Detection Systems	Faculty Lounge (Building 105)	Session 2 chair Dr. Fatimah Alzamzami
14:30	14:50	Autonomous Systems & Robotics	Fouad Trad and Ali Chehab	Manual Prompt Engineering Is Not Dead: A Case Study on Large Language Models for Code Vulnerability Detection with DSPy	Faculty Lounge (Building 105)	Session 2 chair Dr. Fatimah Alzamzami
14:50	15:10	Autonomous Systems & Robotics	İdris Olcay, Erkan Tanyıldızı and Fatih Özkaynak	Novel Methods for Enhancing Statistical Randomness Characteristic Using Chaotic Systems	Faculty Lounge (Building 105)	Session 2 chair Dr. Fatimah Alzamzami

15:10

Asr Prayer Break and Networking



MONDAY 17th FEBRUARY, 2025

Time		Session	Presenter	Title	Location	Session Chair
From	To					
09:00	09:30	Registration + Coffee			Building 105 – the main Hall	
Panel Discussions						
09:30	10:30	Panel Discussion I	<ul style="list-style-type: none"> Fahad A. Alhamed - Chairman of the board at the Saudi Cloud Computing Association, SDAIA Dr. Ahmed Darwish Elsayed - Head of Digital Delivery, Bank Albilad Dr. Khulood Almani - Founder and CEO at HKB Tech 	From Data to Decision: How Data Science Transforms Industries	Main Auditorium (Building 105)	Moderator: Dr. Ahmad Azeem
10:30	11:30	Panel Discussion II	<ul style="list-style-type: none"> Ziyad Alshaikh - Director at EY Imran Hashim - Director IT Infrastructure at MEDGULF Prof. Muhammad Khurram Khan - Founder & CEO of Global Foundation for Cyber Studies and Research - KSU 	Harnessing AI and Machine Learning for Digital Transformation	Main Auditorium (Building 105)	Moderator: Dr. Abrar Wafa
11:30	13:00	Prayer and Lunch Break (Building 105- Ground Floor)				
13:00	13:30	Speaker	Dr. Ahmed Alsinan Research, Healthcare, and Education SA Lead at Amazon Web Services (AWS)	The Future of Higher Education with AI	Main Auditorium (Building 105)	
13:30	14:00	Speaker	Zahra Al-Kaf Cloud Customer Engineer at Google	Re-imagine the future of Education with Google Cloud	Main Auditorium (Building 105)	



14:00	14:30	Speaker	Nizar Alhumaidi Lead Technical Architect Specialist at MachinesTalk	Accelerate the adoption of AI and IoT technologies	Main Auditorium (Building 105)		
3: Conference Session (1) / Parallel							
10:00	10:20	Transformative Impact of AI Across All Sectors	Abdulaziz AlSowail,	Snow Forecasting with Machine Learning	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
10:20	10:40	Transformative Impact of AI Across All Sectors	Meteb Fahad Almadi	Data-Driven Machine Learning Models for Enhanced Fetal Health Classification and Monitoring	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
10:40	11:00	Transformative Impact of AI Across All Sectors	Abeer Al-Qahtani, Fatmah Al-Mahawes, Fatmah Al-Qahtani, Lamia Berriche and Souad Larabi-Marie Sainte	Cloud-Based Emotion Recognition Application for Arabic Autistic Kids	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
11:00	11:20	Transformative Impact of AI Across All Sectors	Jwahr Aljebreen, Ashwaq Alhargan and Shimaa Nagro	Enhancing Zero-Shot Question Answering in Arabic Language with Fine-tuned AraGPT Model	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
11:20	11:40	Transformative Impact of AI Across All Sectors	Syed Mohamed E and Yasmin Regina M	Modeling of Tsunami Wave Generated by Volcanic Eruption Using Impulsive Disturbance for 2022, Tonga Island Tsunami	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
11:40	12:00	Transformative Impact of AI Across All Sectors	Seham Alsulami, Amal Alsobhi, Abrar Alabdli, Tarik Alafif, Mohammad Jassas and Khaled Albishre	Towards Automatic Arabic Test Scoring: Leveraging ChatGPT for Prompt Design	Lecture Hall 2-C02 (Building 105)	Session Chair: Dr. Ali AlQahtani	
12:00	13:00	Prayer and Lunch Break (Building 105- Ground Floor)					



4: Conference Session (2) / Parallel

10:00	10:20	Autonomous Systems & Robotics	Sarah Kaleem, Muhammad Babar, Basit Qureshi, Mohammad El-Affendi and Anis Koubaa	Comparative Analysis of Federated Learning Techniques in Big Data-Driven Intelligent Transportation Systems	1-A01 (Building 105)	Session chair: Dr. Yasi Javid	
10:20	10:40	Autonomous Systems & Robotics	Harri Renney, Max Nethercott, Liv Williams, Jayden Evetts and James Lang	Reimagining the Data Landscape: A Multi-Agent Paradigm for Data Interfacing	1-A01 (Building 105)	Session chair: Dr. Yasi Javid	
10:40	11:00	Autonomous Systems & Robotics	Usama Shahzore, Shahzad Akbar, Ijaz Ali Shoukat, Amjad Rehman and Tanzila Saba	A Vision Transformer Based Framework for Detection and Classification of Soybean Leaf Diseases	1-A01 (Building 105)	Session chair: Dr. Yasi Javid	
11:00	11:20	Autonomous Systems & Robotics	Tayyaba Asim, Shahzad Akbar, Usama Shahzore, Amjad Rehman, Tanzila Saba and Noor Ayesha	Retinal Image Analysis for Detection of Diabetic Macular Edema Using Transfer Learning	1-A01 (Building 105)	Session chair: Dr. Yasi Javid	
11:20	11:40	Autonomous Systems & Robotics	Omar Basubeit and Aznul Qalid Md Sabri	Predicting the Length of Hospital Stay Using Machine Learning: An Explainable Artificial Intelligence Approach	1-A01 (Building 105)	Session chair: Dr. Yasi Javid	
12:00	13:00	Prayer and Lunch Break (Building 105- Ground Floor)					

5: Conference Session (3) / Parallel

10:00	10:20	Revolutionizing Software Engineering for AI and Computational Intelligence	Attila Fazekas and György Kovács	Enumerating the k-fold Configurations in Multi-Class Classification Problems	1-B17 (Building 105)	Session chair: Dr. Abdulaziz Al Helali
10:20	10:40	Revolutionizing Software Engineering for AI and Computational Intelligence	Usama Shahid, Muhammad Zunnurain Hussain and Dr William Sayers	Computational Analysis of Quran Text using Machine Learning and Large Language Models	1-B17 (Building 105)	Session chair: Dr. Abdulaziz Al Helali



10:40	11:00	Revolutionizing Software Engineering for AI and Computational Intelligence	Anikha D Nair, Sanjana Ss, Joes Anto, Nebin K Raj and Arthy M	Personalized Symptom Analysis using Large Language Models	1-B17 (Building 105)	Session chair: Dr. Abdulaziz Al Helali
11:00	11:20	Revolutionizing Software Engineering for AI and Computational Intelligence	Ashir Javeed, Anton Borg, Hakan Grahn, Lars Lundberg, Dhyey Patel and Sogand Shirinbab	Improving Cloud Efficiency: A Machine Learning-Based Stacking Model for CPU Utilization Prediction	1-B17 (Building 105)	Session chair: Dr. Abdulaziz Al Helali
11:20	11:40	Revolutionizing Software Engineering for AI and Computational Intelligence	Muhammad Akhlaq and Syed Zeeshan Mahfooz	Integrating DDP to Enhance Cryptographic Potential of Latin Squares through Increased Permutation Diversity	1-B17 (Building 105)	Session chair: Dr. Abdulaziz Al Helali
12:00	13:00	Prayer and Lunch Break (Building 105- Ground Floor)				

6: Conference Session (1) / Parallel [Online]

10:00	10:20	Revolutionizing Software Engineering for AI and Computational Intelligence	Ahan Bhatt, Ishaan Mehta and Pravin Patidar	Leveraging LSTM for Predictive Modeling of Satellite Clock Bias	1-B15 (Building 105)	Dr. Tareq Soussan
10:20	10:40	Revolutionizing Software Engineering for AI and Computational Intelligence	Aftab Ara	The Role of Business Intelligence in Transforming HR Practices: A Focus on Employee Retention and Performance Management	1-B15 (Building 105)	Dr. Tareq Soussan
10:40	11:00	Revolutionizing Software Engineering for AI and Computational Intelligence	Taha Etem	The Bagged Tree Ensemble Model for Predicting Steel Industry Energy Consumption Profile	1-B15 (Building 105)	Dr. Tareq Soussan
11:00	11:20	Revolutionizing Software Engineering for AI and Computational Intelligence	Ahmed Aljohani, Raed Alharbi, Asma Alkhalidi and Wajdi Aljedaani	Evaluating LLMs for Arabic Code Summarization: Challenges and Insights from GPT-4	1-B15 (Building 105)	Dr. Tareq Soussan

7: Conference Session (2) / Parallel [Online]

10:00	10:20	Transformative Impact of AI Across All Sectors	Yoro Dia, Mouhamadou Djimba Thiam, Oumy Niass, Ousmane Sall, Tony Tona Landu and Abdramane Sow	Setting up a Georeferenced Road Accident Database in Senegal: Automatic Data Extraction and GIS Integration	ONLINE	Dr. Esam Othman
10:20	10:40	Transformative Impact of AI Across All Sectors	Mohammed Aljohani, Fayez Alharbi and Mansi Alsmarah	Enhancing Parental Intervention in Online Gaming: A Design Science Approach to Detecting Cyberbullying through Voice Communication	ONLINE	Dr. Esam Othman
10:40	11:00	Transformative Impact of AI Across All Sectors	Armaan Agrawal	Assessing ESG Compliance and Impact: A Zero-Shot Learning Approach to Analyzing Fortune 500 Companies' Sustainability Reports	ONLINE	Dr. Esam Othman
11:00	11:20	Transformative Impact of AI Across All Sectors	Raed Alharbi, Truc Nguyen, Nooshin Yousefzadeh and Ahmed Aljohani	Questionable Fairness in Federated Learning	ONLINE	Dr. Esam Othman

Closing Speech (Auditorium - Building 105)

14:30	15:30	Closing Remarks by Conference Chairs				
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