

Antalya, TÜRKİYE



2025

ACDSA

International Conference
on Artificial Intelligence,
Computer, Data Sciences
and Applications

**Physical
Part**

07
August

DATE :
07-09 August 2025

**CONFERENCE
PROGRAM**



www.acdsa.org
info@acdsa.org



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MESSAGE FROM THE ACDSA'25 CONFERENCE CHAIRS

Dear Esteemed Delegates, Representatives, and Participants,

It is with great pleasure and honor that we welcome you to the International Conference on Artificial Intelligence, Computer, Data Sciences and Applications (ACDSA'25), to be held on August 7–9, 2025 in the beautiful city of Antalya, Türkiye. This conference provides a unique opportunity to bring together researchers, practitioners, academics, and students from around the world to share their latest findings, exchange ideas, and foster collaborations in the rapidly evolving fields of Artificial Intelligence (AI), Computer Science, Data Science, and their multifaceted applications.

As conference chairs, we have strived to design an inclusive and vibrant program that reflects the dynamism and diversity of these interconnected disciplines. From foundational theories to state-of-the-art technologies, ACDSA'25 aims to serve as a platform for presenting high-quality, peer-reviewed research that advances the frontiers of knowledge and supports impactful, real-world solutions. The topics of interest span a wide range, including (but not limited to) machine learning, deep learning, big data analytics, computer vision, natural language processing, intelligent systems, data mining, IoT applications, and emerging trends in computing and AI ethics.

We are particularly proud to host ACDSA'25 in Antalya, a city known for its rich history, breathtaking Mediterranean coastline, and exceptional hospitality. Beyond the academic sessions, we hope that attendees will take the opportunity to enjoy the cultural and natural treasures of this remarkable region, making the conference experience both professionally rewarding and personally memorable.

This event would not be possible without the invaluable contributions of our organizing committee, scientific reviewers, keynote speakers, session chairs, and all the authors who submitted their research for consideration. We extend our deepest gratitude for your commitment to excellence and your efforts in helping shape the success of ACDSA'25.

We sincerely look forward to your active participation, fruitful discussions, and the new collaborations that will undoubtedly emerge from this international gathering. Let us come together to explore new ideas, challenge assumptions, and inspire innovation in AI, computer and data sciences.

Welcome to ACDSA'25, and welcome to Antalya!

Warm regards,
Conference Chairs

CONFERENCE PROGRAM

August 7th, 2025					
Time	HALL-A	HALL-B	HALL-C	HALL-D	HALL-E
08:30-08:40	Opening Speech <i>Prof. Dr. Mehmet AKTAN</i> ACDSA'25 Conference Chair (Vice Rector of Antalya Bilim University, TÜRKIYE)				
08:40-09:00	Keynote Speech <i>Dr. Deniz GENÇAGA</i> (Antalya Bilim University, TÜRKIYE) Title: Uncovering Casual Dynamics in AI with Transfer Entropy				
09:00-09:30	Keynote Speech <i>Prof. Dr. Rina SINGH</i> (Carnegie Mellon University, USA) Title: Human Voice as Biometric: Can Generative AI Systems Really Emulate It?				
09:30-11:00	Session A-I: Artificial Intelligence - I	Session B-I: Artificial Intelligence - V	Session C-I: IoT & Cybersecurity	Session D-I: Big Data & Data Science - I	Session E-I: Machine Learning
11:00-11:15	COFFEE BREAK				
11:15-13:00	Session A-II: Artificial Intelligence - II	Session B-II: Artificial Intelligence - VI	Session C-II: Control & Automation	Session D-II: Big Data & Data Science - II	Session E-II: Deep Learning
13:00-14:00	LUNCH				
14:00-14:30	POSTER SESSION				
14:30-15:00	Keynote Speech <i>Prof. Dr. Giancarlo Storti GAJANI</i> (Politecnico di Milano, Italy) Title: Artificial Intelligence in Power Systems and Electric Mobility				
15:00-16:30	Session A-III: Artificial Intelligence - III	Session B-III: Artificial Intelligence - VII	Session C-III: Internet of Things	Session D-III: Mixed - I	Session E-III: Machine Learn. & Big Data
16:30-16:45	COFFEE BREAK				
16:45-18:15	Session A-IV: Artificial Intelligence - IV	Session B-IV: Artificial Intelligence - VIII	Session C-IV: Energy & Control	Session D-IV: Mixed - II	

Opening Speech



General Chair

Prof. Dr. Mehmet AKTAN

Vice Rector of Antalya Bilim University, TÜRKİYE

08:30 - 08:40

Keynote Speech



Keynote Speech

Dr. Deniz GENCAGA

(Antalya Bilim University, TÜRKİYE)

Title: Uncovering Casual Dynamics in AI with
Transfer Entropy

08:40-09:00

Keynote Speech



Keynote Speech

Prof. Dr. Rita SINGH

(Carnegie Mellon University, USA)

Title: Human Voice as a Biometric: Can Generative
AI Systems Really Emulate It?

09:00-09:30

Keynote Speech



Keynote Speech

Prof. Dr. Giancarlo Storti GAJANI

(Politecnico di Milano, Italy)

Title: Artificial Intelligence in Power Systems and
Electric Mobility

14:30-15:00



13:00-14:00

POSTER SESSION

14:00-14:30

HALL - A

**Session A-I: Artificial Intelligence - I
09:30-11:00**

Coffee Break 11:00-11:15

**Session A-II: Artificial Intelligence - II
11:15-13:00**

Lunch 13:00-14:00

Poster Session 14:00-14:30

Keynote Speech 14:30-15:00

**Session A-III: Artificial Intelligence - III
15:00-16:30**

Coffee Break 16:30-16:45

**Session A-IV: Artificial Intelligence - IV
16:45-18:15**

09:30-11:00

Session A-I: Artificial Intelligence - I
Session Chair: Gengsheng L. Zeng

P. ID	TITLE	AUTHORS
96	A General Neural-Network Decoder for Error-Correcting Codes	Gengsheng L. Zeng
131	AI Meets Linguistics SayItRight: A Platform for Personalized Language Learning and Pronunciation Enhancement	Murad Al-Rajab , Samia Loucif, Mousa Herzallah, Fares Zaki, Abdulwahed Zraik, Suhail Odeh, Ahmed Amer
177	Topic Modeling Enhancement using Summaries Generated by LLM Models	Haya El Ghalayini , Min Liu, Hetkumar Patel, Rasheed Amanzai, Bhagyesh Patel
179	From Words to Conversations: Leveraging Large Language Models for Dynamic Landing Page Generation	Verena Schickmair, Rimbert Rudisch-Sommer , Andreas Stöckl
207	A Forensic and Technological Perspective: AI-Powered Domestic Violence Hotlines	Melda Yazıcıoğlu , Aylin Yalçın Sarıbey



COFFEE BREAK (11:00 - 11:15)



11:15-13:00

Session A-II: Artificial Intelligence - II
Session Chair: Alexandru Lavric

P. ID	TITLE	AUTHORS
242	Deploying Multilingual ASR in Digital Twin Systems: A Performance and Efficiency Analysis of Whisper and SeamlessM4T	Bauyrzhan Amirkhanov, Gulnur Tyulepberdinova, Gulshat Amirkhanova, Sholpan Tletay, Alikhan Amirkhanov , Alina Raeva
277	Efficient Brain Tumor Detection in MR Images Using Deep Feature-Extracted Machine Learning	Md. Ahsan Ullah, Kazi Shah Nawaz Ripon , Lasker Ershad Ali, Md. Azizur Rahman, Md. Zahidul Islam, Jinwen Ma
363	AI-Powered Capabilities for IoT Spectrum Sensing Applications	Partemie-Marian Mutescu, Alexandru Lavric , Adrian-Ioan Petrariu, Valentin Popa
382	Genetic Algorithm for Subset Selection in Synthetic Tabular Data	Waldemar Hahn , Martin Sedlmayr, Markus Wolfien
388	AI-Based Heart Disease Diagnosis and Risk Assessment	Basma Osman , Khawla Arjebi, Malek Karaim
408	Hybrid Ensemble Solar Irradiance Forecasting in Limpopo, South Africa: A Regional Assessment for Renewable Energy Integration	Pfano Nemakonde , Fhulufhelo Nemangwele, Mukovhe Ratshitanga

15:00 - 16:30

Session A-III: Artificial Intelligence - III
Session Chair: Ulas Bagci

P. ID	TITLE	AUTHORS
577	Beyond Words: Advancing AI-Based Cyberbullying Detection - A Comprehensive and Practical Approach	Sakirulai Olufemi Isiaq , Ademayowa Adeogun, Peter Phiri
584	Uncertainty-Guided Coarse-to-Fine Tumor Segmentation with Anatomy-Aware Post-Processing	Ilkin Sevgi Isler, David Mohaisen, Curtis Lisle, Damla Turgut, Ulas Bagci
717	Proposal of a business model for enhancing customer expectations and satisfaction through the use of generative AI	Chanwoo Lim , Fumiko Harada, Hiromitsu Shimakawa
720	On AI-Based Maintenance of Medical Equipment in Home-Based Settings	Daniel Einarson
724	Using a Karnaugh Model to Predict the Relationship between Smoking and Diabetes Type 2	Arwa Zabian



COFFEE BREAK (16:30 - 16:45)



16:45 - 18:15

Session A-IV: Artificial Intelligence - IV
Session Chair: Loredana Judele and Daniel Lepadatu

P. ID	TITLE	AUTHORS
764	Scrap and root cause analysis with machine learning method for HDP -High Pressure Pump- in gasoline systems	Guler Yemenici , Mine Tekelioglu
766	Real-Time Identification of Desert Truffle Cracks via Deep Learning-Based Object Detection in Saudi Arabian Deserts	Abdullah Alshammari
772	Advanced Nano-concrete Characteristics Materials Prediction Using Taguchi Design of Experiment and Artificial Neural Networks	Daniel Lepadatu , Loredana Judele, Dana Roxana Bucur, Ion Rusu, Eduard Proaspat, Daniel Lepadatu, Pavel Ciubarca, Abdessamad Kobi
773	Compositional Knowledge Graph for Clinical Decision Support in Pediatric Allergy Diagnostics	Yousef Khan , Paulina Tworek, Luca Gherardini, Roman Lewandowski, Marek Mikołajczyk, Jose Sousa
738	V2X-SIEM: A Lightweight Security Information and Event Management Architecture for Connected and Autonomous Vehicles	Rafael Abreu , Pedro Ferreira, Carlos Serôdio, Frederico Branco, António Valente, Manuel Cabral

HALL - B

Session B-I: Artificial Intelligence - V
09:30-11:00

Coffee Break 11:00-11:15

Session B-II: Artificial Intelligence - VI
11:15-13:00

Lunch 13:00-14:00

Poster Session 14:00-14:30

Keynote Speech 14:30-15:00

Session B-III: Artificial Intelligence - VII
15:00-16:30

Coffee Break 16:30-16:45

Session B-IV: Artificial Intelligence - VIII
16:45-18:15

09:30-11:00

Session B-I: Artificial Intelligence - V
Session Chair: Saiqa Aleem

P. ID	TITLE	AUTHORS
1068	From Boomers to Zoomers: Cyber Security Behaviours in an AI Era	Andrew Burd, Elzbieta Titis
1098	Metaheuristic Optimization for Energy Efficiency and Lifetime Extension in Wireless Sensor Networks: A Comprehensive Survey	Oumaima Hassan , Mohammed-Essaid Riffi, Ilyass Mzili
1105	Design of a Smart Handwriting Tool for Early Detection of Alzheimer's Disease	Ikram Bazarbekov , Madina Ipalakova, Yevgeniya Daineko, Samat Mukhanov, Madina Bazarbekova, Zhibek Zholdassova, Galym Kapyshev
1158	Gossip Neural Networks for Invasive Ductal Carcinoma Detection Using Histopathological Images	Bengisu Atli, Akin Öztürk, Yusuf Öztürk
1167	Trust in the Machine: How Empathy and Exposure Shape Human Engagement with Social Chatbots	Jihene Mrabet , Nahla Moussa, Ms Rita Mansour, Essa Alhendi



COFFEE BREAK (11:00 - 11:15)



11:15-13:00

Session B-II: Artificial Intelligence - VI
Session Chair: Muhammad Usama Shakeel

P. ID	TITLE	AUTHORS
821	Artificial Intelligence in Green Supply Chain Management: a Literature Review	Rania Beniaich , Aziz Hmioui
900	Comparing Generative Artificial Intelligence (GenAI) Models' Capabilities in Solving Cryptographic Problems and Algorithms	Ali Almadhoob , Ahmed Qarooni, Hasan Khadem
937	Advancing Arabic Speech Recognition Through Large-Scale Weakly Supervised Learning	Mahmoud Salhab , Marwan Elghitany, Shameed Sait, Syed Sibghat Ullah, Mohammad Abusheikh, Hasan Abusheikh
1174	Optimum Clustering for Multi-Border Router Wireless Mesh Networks	Pierre Favrat, Mahboob Karimian, Yann Charbon

15:00 - 16:30

Session B-III: Artificial Intelligence - VII
Session Chair: Nahla Elaraby

P. ID	TITLE	AUTHORS
1172	Exploring Generative AI and Unsupervised Learning for Digital Soil Classification: A Case Study of Algeria	Widad Hassina Belkadi, Yassine Drias , Habiba Drias, Hichem Bouchelkia, Samira Hamdous
1202	Cost-Efficient AI-based Wearable Device for Real-Time Monitoring and Analysis	Shereen Afifi, Jana Korayem, Mirza Baig, Nahla Elaraby
1209	Facing the problem of small numbers in expert-guided modelling: the case of urban health and planning	Carlos R. Garcia-Alonso , Diego Diaz-Milanes, Mark Daniel, Luis Salvador-Carulla
1254	Optimizing Liver Disease Detection with AI: A Comparative Study of Machine Learning and Deep Learning Models	Maryam Khaleghian
1255	Enhancing Breast Cancer Detection: FT-Transformer vs. Traditional Models	Farasat Veisi



COFFEE BREAK (16:30 - 16:45)



16:45 - 18:15

Session B-IV: Artificial Intelligence - VIII
Session Chair: Umar Adeel

P. ID	TITLE	AUTHORS
89	Improving Path Efficiency and Adaptability in Robot Path Planning with I-A*	Muhammad Aatif, Muhammad Zeeshan Baig, Umar Adeel
648	AI Techniques for Anomaly Detection in Polymer-Based 3D Printing: A Review	Layth Jayatwa , Mohammed Mabrok, Dong Suk Han
295	Optimizing Evolutionary Algorithms with a Green Design Framework	Iztok Fister, Iztok Fister Jr., Domen Verber, Andres Iglesias, Akemi Galvez, Vili Podgorelec, Damijan Novak
501	Artificial Intelligence in Product Development and Innovation	Sven A. Beiker , Jonas Waidringer, Chandadevi Giri

HALL - C

**Session C-I: IoT & Cybersecurity
09:30-11:00**

Coffee Break 11:00-11:15

**Session C-II: Control & Automation
11:15-13:00**

Lunch 13:00-14:00

Poster Session 14:00-14:30

Keynote Speech 14:30-15:00

**Session C-III: Internet of Things
15:00-16:30**

Coffee Break 16:30-16:45

**Session C-IV: Energy & Control
16:45-18:15**

09:30-11:00

Session C-I: IoT & Cybersecurity
Session Chair: Abid Mehmood

P. ID	TITLE	AUTHORS
1162	ZBMG-LoRa: A Scalable LoRaWAN for the Internet of Things Utilising a Zone-Based Multi-Gateway Strategy	Mukarram Almuahaya, Tawfik Al-Hadhrani , Omparakash Kaiwartya, David J. Brown
1340	Exploring the Emerging Nexus Between IoT and Supply Chain Risk Management: A Bibliometric Perspective	Ridha Derrouiche , Yasser El Ouarrak, Aziz Hmioui, Bouchra Rajouani, Ikrame Sennouni
699	Innovative train integrity detection and positioning system for secondary regional trains	Riccardo Ferretti Corradi , Augusto Sala, Davide Amato, Fabio Bonizzi
271	The application of digital twins in assessing information security risks	Saltanat Adilzhanova , Tolky Mirkassimova, Gulshat Amirkhanova, Murat Kunelbayev
820	GNSS Spoofing and Jamming Mitigation: A Comprehensive Review	Adel Noah , Mohammed Elmusrati



COFFEE BREAK (11:00 - 11:15)



11:15-13:00

Session C-II: Control & Automation
Session Chair: Dinara Zhussupova

P. ID	TITLE	AUTHORS
232	Statistical Evaluation of Reaction and Movement Times in Pneumatic Systems for Sequential Control Optimization	Jonas Heller , Bernd Lüdemann-Ravit, Lars Penter, Steffen Ihlenfeldt
616	Evaluating Advanced Driver Assistance Systems: A Reliability and Performance Analysis	Marius Misaros, Ovidiu Stan , Dan Gota, Anca Stan, Honoriu Valean, Liviu Miclea
1155	Robust Ball Balancing on Mobile Platforms for Planetary Rover Applications with adaptive control	Dinara Zhussupova , Zamira Abdikalikova
635	The impact of MES on OEE on Smart Manufacturing in Industry 4	Valentin Bobeica , Dan Popescu, Nicoleta Angelescu, Loretta Ichim,

15:00 - 16:30

Session C-III: Internet of Things
Session Chair: Ovidiu Stan

P. ID	TITLE	AUTHORS
239	Development of a Stress Monitoring System	Gulnur Tyulepberdinova , Meruyert Sakypbekova, Murat Kunelbayev, Gulshat Amirkhanova
323	Digital Twin Integration for Proactive Industrial Decision Support: Enhancing Traccar-Based Monitoring Systems	Madiyar Zauranbek , Murat Kunelbayev, Timur Ishmurzin, Miras Tokhtassyn, Nazargozha Abdulkhamit
617	Reliability Study and Implementation of a Smart Fire Installation with IoT Technology	Marius Misaros, Anca Stan , Dan Gota, Ovidiu Stan, Honoriu Valean, Liviu Miclea
1046	A Low-Cost IoT-Based Temperature and Humidity Monitoring System Using DHT11 and Bluetooth Communication with Mobile Integration	Faisal Melhim , Maria Nazir
1088	IoT-Based Framework to Enhance Emergency Communication for People with Disabilities	Shamma Almheiri, Salem Alshkeili, Ali Alnuaimi, Naser Almazroui, Mansour Alsubousi, Osama A. Khashan



COFFEE BREAK (16:30 - 16:45)



16:45 - 18:15

Session C-IV: Energy & Control
Session Chair: Ömer Faruk Görçün

P. ID	TITLE	AUTHORS
804	Renewable Energy's Impact on Reducing the Levelized Cost of Hydrogen in the Production of Green Hydrogen: A Regional Comparison	Pfesesani Netshilonwe , Fhulufhelo Nemangwele, Mukovhe Ratshitanga
805	Towards Sustainability in Incentive Allocation for Renewable Energy Projects: A hybrid AHP-ML Methodology	Bilal En-Nouaary , Aziz Hmioui
1006	Passivity Enhancement of the Output Admittance in Inverter-Side Current-Controlled-Based Inverters	Ali Akhavan , Saeed Golestan, Juan C. Vasquez, Josep M. Guerrero
760	Evaluation of energy harvesting methods for lighting urban roads with single-valued neutrosophic EDAS method	Ömer Faruk Görçün , Hande Küçükönder
311	In-line Quality Inspection for Extrusion-Based 3D Printing via 3D Scanning	Arunas Kleiva , Darius Eidukynas, Gopi Kompelli, Tomas Vaitkūnas, Gediminas Monastyreckis, Mangirdas Penkauskas

HALL - D

Session D-I: Big Data & Data Science - I
09:30-11:00

Coffee Break 11:00-11:15

Session D-II: Big Data & Data Science - II
11:15-13:00

Lunch 13:00-14:00

Poster Session 14:00-14:30

Keynote Speech 14:30-15:00

Session D-III: Mixed - I
15:00-16:30

Coffee Break 16:30-16:45

Session D-IV: Mixed - II
16:45-18:15

09:30-11:00

Session D-I: Big Data & Data Science - I
Session Chair: Julia Poray

P. ID	TITLE	AUTHORS
387	Updating Machine Learning Models in Real-World Applications: Finding Best Deployment Settings	Julia Poray , Paul Jungmann, Bogdan Franczyk, Thomas Heller
745	Reduction of Scrap Rate in Automotive Manufacturing by using Big Data	Aleksej Miel
543	Identifying Messages to Achieve Goals According to Motivation	Jinsei Wada , Fumiko Harada, Hiromitsu Shimakawa



COFFEE BREAK (11:00 - 11:15)



11:15-13:00

Session D-II: Big Data & Data Science - II
Session Chair: Daniela Janstová and Jakub Tomeš

P. ID	TITLE	AUTHORS
551	Analysis of High Frequency Markets: Global News Impact and Efficient Market Hypothesis Insights	Komal Batool , Ubaida Fatima
651	Augmented Reality-Based Gesture Classification: A Data-Driven Analysis Using Meta Quest 3 Hand Tracking	Daniela Janštová , Jakub Tomeš, Jan Mareš
652	A Modular Web-Based Platform for Structured Data Collection and Annotation	Jakub Tomeš , Daniela Janštová, Jan Mareš
675	Clustering-based analysis of the relationship between clothing attributes and ease of styling	Kousuke Yamashita , Fumiko Harada, Hiromitsu Shimakawa
1092	CNN-LSTM-Based Forecasting of Peak Ground Acceleration from Early Seismic Waveforms	Marat Nurtas, Aizhan Altaibek, Ayazhan Kumarkhanova , Tahmina Nessipbay
1231	Online Anomaly Detection in Multi-Parameter Sensor Data Stream for Water Networks	Jyotirmoy Bhardwaj , Linga Reddy Cenkeramaddi

15:00 - 16:30

Session D-III: Mixed - I
Session Chair: Hiroyuki Kagami

P. ID	TITLE	AUTHORS
396	Optimization of production resources in distributed control systems	Jan Jirsa , Petr Marcoň
563	A mathematical model of regression of diffuse coronary atherosclerosis	Hiroyuki Kagami
251	Text-to-3D Generation for Digital Twins in Food Industry: A Point-E Model Application	Tomiris Nurgazy , Gulshat Amirkhanova, Assel Abdildayeva, Nazargozha Abdulkhamit, Azim Aidynuly
1221	Using A-UMUX to Measure Perceived Usability of the Student Information System (SIS) at Arab Open University	Khalid Suliman Al-Tahat



COFFEE BREAK (16:30 - 16:45)



16:45 - 18:15

Session D-IV: Mixed - II
Session Chair: Cristina Adăscăliței

P. ID	TITLE	AUTHORS
291	Validation of LPTN-Based Thermal Modelling for PMSM Using Experimental Data	Cristina Adăscăliței , Claudia Steluța Marțiș, Sorin Iulian Cosman
826	Avoidance, Procrastination and Breach of Trust in Digital Banking - Problems, Evidences, and Reasons for Certain Elderly User Groups	Karin Spevak , René Baranyi, Thomas Grechenig
879	Phishing Vulnerability and Resilience: A Workplace Study in Saudi Arabia	Maryam Alaqel , Justin Thomas, Nada Al-Dabbagh
835	TriCode: a one-shot 2D encoding pattern for information storage and spatial mapping	Luca Di Angelo, Paolo Di Stefano, Emanuele Guardiani , Antonio Marzola
231	The use of color QR codes and blockchain for secure storage and management of biometric and documentary data	Kalybek Maulenov, Nazym Kaziyeva , Ruslan Ospanov, Symbat Ospanova, Assem Konyrkhanova, Bakhtiyar Zharlykassov,

HALL - E

**Session E-I: Machine Learning
09:30-11:00**

Coffee Break 11:00-11:15

**Session E-II: Deep Learning
11:15-13:00**

Lunch 13:00-14:00

Poster Session 14:00-14:30

Keynote Speech 14:30-15:00

**Session E-III: Machine Lear. & Big Data
15:00-16:30**

09:30-11:00

Session E-I: Machine Learning
Session Chair: Seppe Vanden Broucke

P. ID	TITLE	AUTHORS
252	Data-Driven Adaptive Demand Classification: Integrating Prediction Performance and Threshold Expansion	Sina Mirshahi, Taha Falatouri, Patrick Brandtner , Mehran Nasserri, Farzaneh Darbanian, Zuzana Kominkova Oplatkova
308	A new interestingness measure for maintaining specific attributes in Numerical Association Rule Mining	Iztok Fister, Iztok Fister Jr., Damijan Novak, Andres Iglesias, Akemi Galvez, Domen Verber
557	Reinforcement Learning to Model Churn Propagation Dynamics in Social Networks	Yameng Guo, Seppe Vanden Broucke
1116	Towards Reliable and Transparent Diabetes Diagnosis with an Explainable Ensemble Framework for Clinical Decision Support	Pir Bakhsh Khokhar , Viviana Pentangelo, Fabio Palomba, Carmine Gravino
808	Predicting Risk of Pulmonary Fibrosis Formation in PASC Patients	Wanying Dou, Gorkem Durak, Koushik Biswas, Ziliang Hong, Andrea Mia Bejar ✕, Elif Keles, Kaan Akin, Sukru Mehmet Erturk, Alpay Medetalibeyoglu, Marc Sala, Alexander Misharin, Hatice Savas, Mary Salvatore, Sachin Jambawalikar, Drew Torigian, Jayaram K. Udupa, Ulas Bagci



COFFEE BREAK (11:00 - 11:15)



11:15-13:00

Session E-II: Deep Learning
Session Chair: Daniel Einarson

P. ID	TITLE	AUTHORS
176	Integrating Knowledge and Data Driven Methods to Generate Synthetic Mobility Data	Haya El Ghalayini , Min Liu, Hetkumar Patel, Rasheed Amanzai, Haruna Isah
633	Wireless Mesh Networks Routing Optimization using Machine Learning and Deep Learning	Yann Charbon, Eric Tran, Mahboob Karimian, Pierre Favrat
700	Combining Mixture of Experts with Transformer for EEG-based Motor Imagery Classification	Kim Minhyeok, Andrea Corradini
1074	ESG Criteria in the Deep Learning Era: Opportunities and Challenges	Tagui Ayyoub , Regragui Fatiha
1087	Gelatin Source Detection Using Deep Learning: Emphasis on MLP and RNN Variants	Imam Tahyudin , Ades Tikaningsih, Hasri Akbar Awal Razaq, Yuwana Pradana, Aditya Eka Mulyono, Wildan Panji Tresna
1156	Exploring Temporal Machine Learning Approaches for Predicting Methane Discharge in Atmospheric Studies	Sara Zebardast , Nima Kamali Lasseem, Seyid Amjad Ali

P. ID	TITLE	AUTHORS
1215	OCC-NCS: One-Class Classification through Network Community Structure Analysis	Ayham Zaitouny , Anusuya Krishnan, Nazar Zaki
158	Indirect Tire Pressure Monitoring System based on Deep Learning	Kicheol Jeong , Hyomin Jin, Doyeong Kim, Hyunmin Lee, Hyeonkyu Han
559	From Surface to Signature: Vision-Based Identification of Plastic Parts via Fluorescent Particle Patterns	Faruk Civelek
989	Data-Driven Analysis of Voltage Tolerance Effects on MOS Sensors: Ethanol Detection and Stability	Tarik Saidi , Abderazzak Manser, Tesfalem Welearegay
1171	Multi-Capacitated Waste Collection Routing Problem with Container Fill Levels	Esra Boz , Halil İbrahim Ayaz

Posters

PAPER ID	TITLE	AUTHORS
769	Multi-Modal Deep Learning in Breast Cancer Diagnosis: A Review of Recent Advances	Yalda Zafari, Roaa Elalfy, Muhammad Nouman, Somaya Al-Maadeed, Tamer Khattab, Essam A. Rashed, Mohamed Mabrok
254	Research on Path Planning Model of UAV for Emergency Rescue in Plateau Regions	Qi Cao, Chenxi Hou, Xiaopeng Zhang, Wei Zhong
299	Comprehensive Evaluation of L2 Regularization in UNet-ResNet50 and UNet-VGG16 Models with Diverse Image Transformations	Dina Koishiyeva, Kuanysh Alipbayev, Jeong Won Kang, Adil Mukhamedgali, Assel Mukasheva
300	Optimisation of Glaucoma Detection in Fundus Imaging Using Particle Swarm Optimization, Artificial Bee Colony, and Binary Cuckoo Search	Dina Koishiyeva, Kuanysh Alipbayev, Jeong Won Kang, Adil Mukhamedgali , Assel Mukasheva
851	An Autonomous Navigation Method using 2D LiDAR for Structured Indoor Environments	Jesus Canales , Jae-Do Park
360	Synthetic data for developing surrogate models—A case study of multistep forecasting in mineral processing	Akhtar Zeb , Nikhil Verma, Joonas Linnosmaa
1197	Towards Early Detection: Physics-based Hyperspectral Models for the Detection of Tomato Plant Diseases	Marianne Al Hayek, Nadine Abdallah Saab, Olga Assainova, Mohammed El Amine Bechar, Marwa Elbouz, Klervi Crenn, Claudie Monot, Céline Baty Julien, William Manguen, Ayman Alfalou
697	A Hybrid NLP-Expert System Framework for Heuristic Scoring and Fairness-Driven Resume Evaluations	Arup Mohanty, Peter A. Khaiteer
713	Improving Performance of a QA System in a Closed Domain by Question Validation	Seyedehsamaneh Ranjbargol, Marina G. Erechtkhoukova , Mahdi Khazaei
801	Automated Genre Classification of Urdu Poetry Using CNN-BiLSTM: A Deep Learning Perspective	Furqan Khan Saddozai, Ashraf Khalil , Asad Khattak, Naila Tabassum, Muhammad Zubair Asghar
919	Comparative Performance Analysis of Machine Learning Techniques for Engagement Assessment in Education	Mikhayla Maurer, Saiqa Aleem
1114	Portable Machine Vision System for Measuring Polished Metallic Surface Roughness	Hyun-Jin Jeong, Chenglong Luo, Minkyung Jun, Jeongwhan Byon, Jeeyoung Kim, Chang Kee Lee, Hoeryong Jung

NEXT CONFERENCE



BORACAY ISLAND **PHILIPPINES**

05-07 February 2026

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