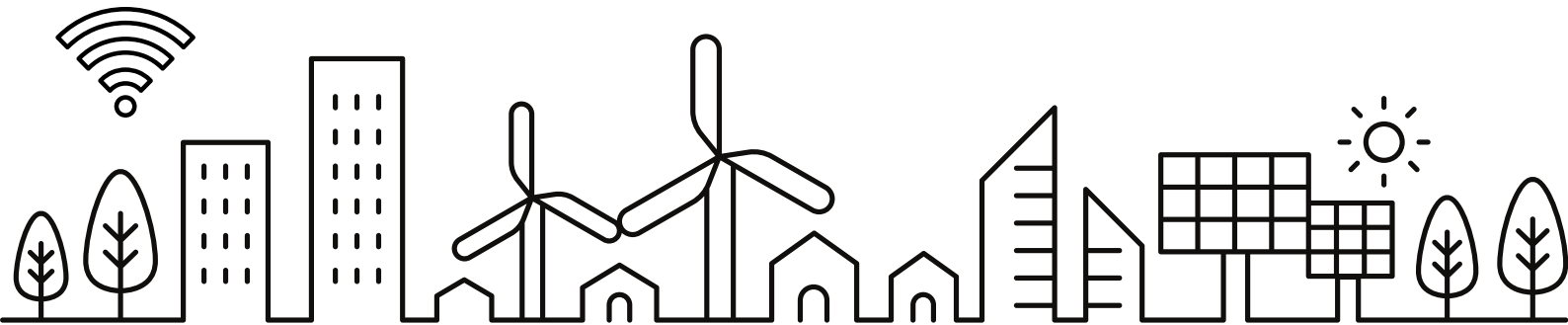
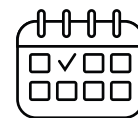
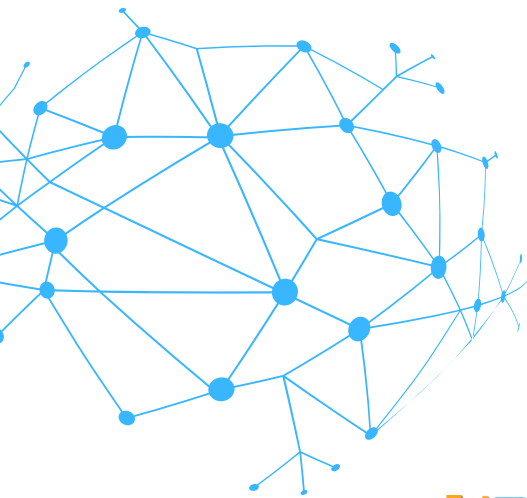




INTERNATIONAL CONFERENCE ON ADVANCED COMMUNICATIONS WITH MODERN CIRCUITS AND SYSTEMS TECHNOLOGIES 2025



CONFERENCE PROGRAM



NOVEMBER
26-28
2025



كليات العلوم والتكنولوجيا

FACULTY OF SCIENCE AND TECHNOLOGY



FACULTY OF SCIENCE AND TECHNOLOGY
SULTAN MOULAY SLIMANE UNIVERSITY
BENI MELLAL, MOROCCO

ACMCST 2025 MAIN PROGRAM

Wednesday, November 26, 2025			
8h00 – 9h00	Welcome and Registration of participants		
9h00 – 10h00	Opening Ceremony of ACMCST 2025 Conference Official Talks		
10h00 – 10h45	Keynote speaker 1 : Prof. Vidas Žuraulis <i>Professor in the Department of Automobile Engineering at Vilnius Gediminas Technical University (VILNIUS TECH)</i> Title : The issues of human-machine interaction meeting autonomous transport Chair : Prof. M.SAIH Co-Chair : Prof. A.REHA		
10h45 – 11h15	Coffee break		
11h15 - 12h00	Keynote speaker 2 : Prof. Mohammed Ali JALLAL <i>Professor at Sidi Mohamed Ben Abdellah University , Fez – Researchs, CEA France</i> Title : AI That Never Stops Learning: The Key to Sustainable and Resilient Energy Systems Chair : Prof. O.Bajjou Co-Chair : Prof. Y.Lakhal		
12h00 – 13h30	Session 1 : Intelligent Systems and Advanced Technologies	Session 2 : Power & Energy	Session 3 : Information and Communication Technologies
13h30 - 15h00	Lunch Break		
15h00 - 17h00	Session 4 (Virtual) : Intelligent Systems and Advanced Technologies	Session 5 (Virtual) : Intelligent Systems and Advanced Technologies	

Thursday, November 27, 2025			
9h30 – 10h15	Keynote speaker 3 :Prof. Klilou Abdessamad Professor in Electrical Engineering Department, Faculty of Sciences and Techniques, Sultan Moulay Slimane University, Beni-Mellal, Morocco. Title : mmWave Radar and Road Safety: Towards Smarter and Safer Mobility Chair : Prof. Y. Ziat Co-Chair : Prof. Z.BOULGHASOUL		
10h15 – 10h45	Coffee break		
10h45 - 12h45	Session 6 : Power & Energy	Session 7 : Intelligent Systems and Advanced Technologies	Session 8 : Electronics Circuits and Systems
12h45 - 14h30	Lunch Break		
14h30 – 15h15	Keynote speaker 4 : Prof. Francisco Falcone Professor in the Electrical and Electronics Department at the Public University of Navarra (UPNA) Title : Next Generation Connecivity towards Cognitive Cities Chair : Prof. H. BOUGAYR Co-Chair : Prof. H. MOUSSAOUI		
15h15 – 17h15	Session 9: Intelligent Systems and Advanced Technologies	Session 10 (Virtual): Information and Communication Technologies	
	Session 11 : Intelligent Systems and Advanced Technologies		
17h15 – 18h00	Coffee break		
20h00 - 22h00	GALA DINNER (with additional fees)		

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Systems Technologies (ACMCST 2025)**

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Friday, November 28, 2025	
9h00 – 10h00	Keynote speaker 5 : Dr. Charif Mahmoudi Senior Security Architect at Siemens Technology USA Title : AI applications for cybersecurity in Industrial IoT Chair : Prof. Y. RHAZI Co-Chair : Prof. H.HAJJAMI
10h00 – 10h30	Coffee break
10h30 - 12h15	Session 12 (Virtual): Intelligent Systems and Advanced Technologies
12h15 - 12h45	Closing Ceremony
14h00- 15h00	Lunch Break

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SESSIONS PROGRAM OF ACMCST 2025 CONFERENCE

Room 1 ID	Session 1 : Intelligent Systems and Advanced Technologies Wednesday, November 26, 2025 - 12h00 - 13h30 Moderators: Pr. EL YASSINI Abdessalam, Pr. MEJDOUB Youssef Pr. ELAMRI Abdelkebir, Pr. ELMERABET Youssef
661172	Transforming Remote Practical Learning through AI and Embedded Systems: Redefining the Role of Educators EL GOURARI Abdelali, EZZINI Mustapha, ENNEJJAR Mohammed, MOUACHI Raja, RAOUFI Mustapha, SKOURI Mohammed
664074	Enhancing Digital Education in Electricity through an AI Avatar with RAG and Fine-Tuned LLMs Abir Zennir, Abdelali El Gourari, Mustapha Raoufi, Mohammed Skouri
664073	Intelligent Professor Avatars: Virtualizing University Courses through Artificial Intelligence and Big Data Idrissi mohamed, El Gourari abdelali, Raoufi mustapha, Skouri mohammed
662643	Modeling of an energy management system for AC-DC microgrid using rule-based strategy SAADOUKI Ilham, LAKHAL Yassine, MECHBOUH Abdelfattah, EL OUARDI Said, SAIH Mohamed

Room 2 ID	Session 2 : Power & Energy Wednesday, November 26, 2025 - 12h00 - 13h30 Moderators: Pr. BOUZIANE Ahmed, Pr. CHAJI Kebir Pr. AOUAJ Abdellah, Pr. NOUACRY Ahmed
661379	Nonlinear Modeling and Electromagnetic Parameters Identification for Switched Reluctance Machine DAHANE Abdelmounim, EL MANSOURI Fatima Ezzahra, BROURI Adil, OUBOUADDI Hafid, MOSAAD Mohmed I., KADI Laila
662790	Fault detection and localization in Smart Grids using an Impedance-Based Method MECHBOUH Abdelfattah, LAKHAL Yassine, EL OUARDI Said, SAADOUKI Ilham, BAGHLI Fatima Zahra
662089	Advanced Nonlinear Control Strategies for MPPT Based PV Systems: A Comparative Performance Analysis Meskini mohammed Amine, Khafallah mohamed, Hassoune abdelilah, Diouri anas
662178	Comparative Study for Short and Long-Term Energy Consumption Forecasting in the Town of Belyounech, Morocco Ahmed El Ghammat, Youssef Mejdoub, Kaoutar Senhaji Rhazi

Room 3 ID	Session 3: Intelligent Systems and Advanced Technologies Wednesday, November 26, 2025 - 12h00 - 13h30 Moderators: Pr. TAJER Abdelouahed, Pr. KLILLOU Abdessamad Pr. ELBACHA Abdelhadi, Pr. BOULGHASOUL Zakaria
661587	Benchmarking Embedded C Code Generation Techniques for Safety-Critical Automotive Applications Aligned with MISRA C and ISO 26262 Latif rachid, Bellaou moussa, Amenzouy lahoucine, Elboudani abdessamad
663194	Seatbelt detection using YOLO deep learning model in Moroccan roads Mohamed Ragoubi, Abdessamad Klilou, Assia Arsalane, Ahmed Nouacry, Kebir Chaji
663161	Evaluation and Adaptation of Visual SLAM Algorithms for Precision Agriculture AIT SIDI LAHCEN Karim, BAKAS Khaoula, SADDIK Amine, DLIOU Azzedine, HSSAISOUNE Mohammed, BOUCHAOU Lhoussaine
663837	Hybrid Data-Driven Approach for Fault Detection and Classification in electrical Distribution Networks SARIH Saad, BOULGHASOUL Zakaria, CHABAA Samira, ELBACHA Abdelhadi, TAJER Abdelouahed
663694	Embedded implementation of fuzzy systems and fuzzy Q-Learning for energy management of electric vehicles AIT BIHI Abdelouahd, ARICHE Salma, BOULGHASOUL Zakaria, EL OUARDI Abdelhafid, ELBACHA Abdelhadi, TAJER Abdelouahed, ESPIÉ Stéphane

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Room1 ID	<p>Link : https://meet.google.com/iqy-qwhh-xnq</p> <p>Session 4 (Virtual) : Intelligent Systems and Advanced Technologies</p> <p>Wednesday, November 26, 2025 - 15h00 - 17h00</p> <p>Moderators: Pr. MOUACHI Raja, Pr. HAMDOUN Ouafae</p> <p>Pr JADOUAL Lamya, Pr. JAKJOUR Fatima-zahra</p>
663118	A Deep Learning-Based System for Pulmonary Disease Classification Using Chest X-Rays and Respiratory Sounds EL Aamrani mohamed, Bengoud kenza, Khouia salma, Zioual zineb, Ibntalib mohamed Hamza
663126	Isolated Sign Recognition from Pose Sequences: An Empirical Evaluation of ML and DL Models LAHMIMSI Basma, BENGOUZ Kenza, LANÇAR Nouhaila, KHOUYA Karima
662913	Skin Disease Classification Using Transfer Learning techniques HADROU Adnan, BENGOUZ Kenza, ELHADRACHI Fatima-Ezzahra, ELRHERARI Asmaa, ELHARCH Rania
663937	Machine Learning Based Traffic Prediction: A Literature Review EL BEKAL Fatima Zahra, ZYTOUNE Ouadoudi
662099	Mamba for Medical Imaging: Breast Cancer Classification in Ultrasound with State Space Models ANIQ Elmehdi, FAOUZI EL-GHANAOUI Ayoub, Mohammed JETTI, CHAKRAOUI Mohamed
661756	Modeling and Prediction of PV Module Temperature: From Empirical Equations to Artificial Intelligence EZZINI Mustapha, MOHAMMED Ennejjar, MOUACHI Raja, EL GOURARI Abdelali, BOUKENDIL Mohammed, RAOUFI Mustapha

Room 2 ID	<p>Session 5 : Intelligent Systems and Advanced Technologies</p> <p>Wednesday, November 26, 2025 - 15h00 - 17h00</p> <p>Moderators: Pr. SADDIK Amine, Pr. LATIF Rachid</p> <p>Pr. DLIOU Azzedine, Pr. ABOUZAHIR Mohamed</p>
662831	Intelligent and Dynamic Traffic Light Control System ELBOUZIDI Walid, JOUAHRI Mohammed Amine, Zakaria BOULGHASOUL, TAJER Abdelouahed
663997	FPGA-Based RISC-V System-on-Chip: Design and Implementation AZAZ Abderrahmane, BAKAS Khaoula, SADDIK Amine, DLIOU Azzedine
663790	Deep Learning Models for Traffic Sign Detection: An Empirical Comparison of YOLO Variants TAOUZI Imane, KLIOU Abdessamad, ARSALANE Assia, CHAJI Kebir
662668	Real-Time Background Subtraction Using OpenMP-Accelerated Codebook and GMM on Multi-Core CPUs TEBBAA Brahim, BARIKO Smail, KLIOU Abdessamad, ARSALANE Assia
672559	Optimal adaptive neural network based PID using evolutionary strategy optimization for autonomous vehicle Ouakki BOUCHIAD, Lhoussain EL HAJJAMI, Abdessamad KLIOU, Ahmed NOUACRY
663164	High-Performance ORB-SLAM3 Deployment for Autonomous Navigation in Agricultural Fields RIDOUANE Othman, BAKAS Khaoula, SADDIK Amine, DLIOU Azzedine, HSSAISOUNE Mohammed, BOUCHAOU Lhoussaine

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Room 3 ID	Session 6 : Information and Communication Technologies Wednesday, November 26, 2025 - 15h00 - 17h00 Moderators: Pr. GHAMMAZ Abdelilah, Pr. ROUIJAA Hicham Pr. OULAD SAID Ahmed, Pr. EL GOURARI Abdelali
661262	Compact Dual-Band Microstrip Antenna Design for 5G and IoT Applications Using Slot and Parasitic Coupling Ayoub BENHAMOU, Yassine MESBAHI, Sanae HABIBI, Seddik BRI, Mohamed HABIBI, Omar MOUHIB
661163	Exploring the performance of graphene in THz communication through nanoantenna design, comparing it to copper material BIQAA Rida, KHABBA Asma, IBNYAICH Saida, BELAHRACH Hassan, ZEROUAL Abdelouhab
663166	A Statistical Investigation of Diacritical Ambiguity in Arabic Lapointe maimouna, Kadim ayoub, Dliou azzedine
661221	A Crescent-Shaped Microstrip Patch Antenna for 2.4 GHz ISM Applications Yassine MESBAHI, Ayoub BENHAMOU, Sanae HABIBI, Seddik BRI, Mohamed HABIBI, Omar MOUHIB
663168	Natural Language Interface for NoSQL Document-Oriented Databases BAIS Hanane, MAHKOUR Mustapha
664143	Design and optimization of a compact hexagonal CWP microstrip antenna with multi-band and wideband characteristics for ISM and Sub-6 GHz Mohamed Ben Brahim, Abdessalam El Yassini, Youssef Mejdoub, Abdelkebir ELAMRI

Room 1 ID	Link : https://meet.google.com/jsb-zgku-vhu Session 7 (Virtual): Intelligent Systems and Advanced Technologies Thursday, November 27, 2025 - 10h45 - 12h45 Moderators: Pr. ARSALANE Assia, Pr. ELHAJJAMI Lhoussain Pr. VIDAS Žurautis, Pr. MAKAYSSI Taoufik
663951	Pruning, Knowledge Distillation and Quantization of YOLOv8n for Edge-Based Precision Agriculture HMACHE Fatima, BELLOUT Abdelaaziz, ZARBOUBI Mohamed, AIT BA Asma, CHAHBA Mariam, DLIUO Azzedine, SADDIK Amine, BOUHARROUD Rachid
661373	AI-Embedded Architectures for Environmental Monitoring: A Comprehensive Review Jahid khadija, Latif rachid, Saddik amine
663867	Intelligent System for Detection and Classification of Tomato Leaf Diseases Asmae Salih, El Mehdi Cherrat, Azzedine Dliou, Amine Saddik, Mohamed Zarboubi
663957	YOLOv10-Based Smart Trap for Codling Moth Detection with IoT Alerts AIT BA Asma, ZARBOUBI Mohamed, HMACHE Fatima, CHAHBA Mariam, CHABAA Samira, DLIUO Azzedine, ZEROUAL Abdelouhab, BELLOUT Abdelaaziz, SADDIK Amine, BOUHARROUD Rachid
663952	Real-Time Embedded AI System for Tomato Pest Detection and Classification Using YOLOv11n and YOLOv11-cls CHAHBA Mariam, ZARBOUBI Mohamed, BELLOUT Abdelaaziz, AIT BA Asma, HMACHE Fatima, DLIUO Azzedine, SADDIK Amine, BOUHARROUD Rachid
661703	Embedded parallel cuda-based ecg signal processing with multilevel dwt and memory optimisation EL FERDAOUSSE Hanane, JENKAL Wissam, LAABOUBI Mostafa, LATIF Rachid
661675	Efficient AI-Powered Orange Health Assessment And Yield Estimation Khaoula Bakas, Amine Saddik, Azzedine Dliou, Mohammed Hssaisoune, Said El Hachemy, Hamza Ait-Ichou, Lhoussaine Bouchaou

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Room 2 ID	Session 8 : Electronics Circuits and Systems Thursday, November 27, 2025 - 10h45 - 12h45 Moderators: Pr. AQIL Mounaim, Pr. BOUDAOU Abdelghani Pr. RHAZI Youssef, Pr. REHA Abdelati
654707	Cross-Shaped Patch Antenna with Parallelogram Extensions for IoT and Mobile Applications Achennani ahmed, El Merabet youssef, Rhazi youssef, Marzouk mohamed
663955	Low-Memory CNN-GRU-Attention Network for Accurate ECG Arrhythmia Detection on Edge Devices ALBOURINE Saad Eddine, BEN SALAH Mohamed, DLIOU Azzedine, ZARBOUBI Mohamed
661320	Lightweight Hybrid MobileNet-ViT Architecture for Efficient Cervical Cancer Classification in Cytological Images SANGARE Mamadou Eric, NASSIRI Boujema, EL HABOUZ Youssef, EL MOURABIT Yousef, TEMBINE Hamidou, BSISS Mohamed Aziz
662986	Conventional Patch Antenna Structures for Biomedical Applications Amal Aarab , Abdelati Reha, Omaima Benkhadda , Saida lbnyaich, Zeroual Ab delouhab

Room 3 ID	Session 9 : Power & Energy Thursday, November 27, 2025 - 10h45 - 12h45 Moderators: Pr. ZIAT Younes, Pr. LAGHLIMI Charaf Pr. HAMDANI Hamid , Pr. BOUGAYR El Houssayne
661104	AI-Powered Energy Optimization for IoT Edge Devices Using Reinforcement Learning Ait Baissi taha, Hikki mourad
660440	Photocatalytic Potential of Double Perovskite Hydrides Cs₂CaCdH₆ and Rb₂CaCdH₆: A Continuation of a DFT-Based Study EJJABLI Abdelkebir, KAROUCHI Mohamed, ERRAHOUI Hamza, LAASSOULI Abdelmounaim, EL HAJI Aymane, LACHTIOUI Youssef, BAJJOU Omar
661364	Real-Time Energy Optimization in Smart building via Neural Network Control EL KAMILI Moad, TOUAIRI Souad, MABROUKI Mustapha
661372	Improvement of a Wind Turbine's Performance via Adaptive PID Control: Towards Optimised Energy Production EL OUALI Achraf, LAKHAL Yassine, SAIH Mohamed, BENCHAGRA Mohamed, SLIMANI Hicham
661102	Deep Learning Models for Fault Detection in Photovoltaic Systems: A Comparative Study OUMIGUIL Lahoucine, NEJMI Ati, SADIK Youssef, BAITE Mohamed

Room 1 ID	Link : https://meet.google.com/irv-xycn-kgd Session 10 (Virtual): Information and Communication Technologies Thursday, November 27, 2025 - 15h15 - 17h15 Moderators: Pr. Redouane ER-REBYIY, Pr. BENKHADDA Omaima Pr. SAIH Mohamed, Pr. CHABAA Samira, Pr. HADIRI Soukaina
663016	Predicting Product Obsolescence Using Machine Learning: A Feature-Based Approach ESSABBAR Driss, ASLY Ishaq
661567	When are additional antennas useful in Massive MIMO? Riadi Abdelhamid and Moha M'Rabet Hassani
663158	QoS-Aware Dynamic Routing in SD-IoT Using Dijkstra Algorithm: A Multi-Traffic Evaluation Grif Abdelali and Zyane Abdellah
663944	Distributed Artificial Intelligence for Cybersecurity in Internet of Things: A Survey HDIDOU Rachid, EL ALAMI Mohamed
660841	User Perception-Driven Energy Scheduling: A Human-Centered Strategy for Moroccan Households ENNEJJAR Mohammed, EZZINI Mustapha, JALLAL Mohammed Ati, CHABAA Samira, ZEROUAL Abdelouhab

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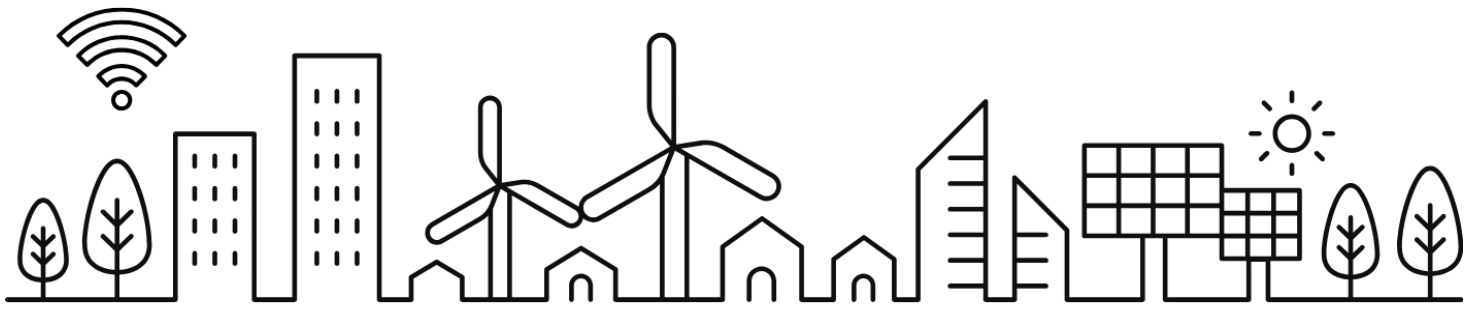
Room 2 ID	Session 11 : Intelligent Systems and Advanced Technologies Thursday, November 27, 2025 - 15h15 - 17h15 Moderators: Pr. BAGHLI Fatima Zahra, Pr. BAJJOU Omar Pr. LACHTIOUI Youssef, Pr. MOUSSAOUI Haytem
661252	ECO-TRACK: Trash Classification and Face Detection Powered by Computer Vision SABRI Majdoulaine, ZEGUENDRY Amine, ZIKI Rajae
661256	AI-Driven Traffic Flow Management System: Real-Time Blockage Detection, Emergency Prioritization, and Road Hazard Monitoring AITRAIS Youssef, ZEGUENDRY Amine, RAJI Ayoub, EL KSAKES Elmehdi, ELOUARNAZ Yassine
662437	Development of a Laboratory Setup for Electric Vehicle Emulation in Automotive Research HASSOUNE Abdelilah, MESKINI Mohammed Amine, DIOURI Anas, KHAFALLAH Mohamed
661377	Robust DPC for DFIG in Wind Energy Conversion Systems: Neural Networks compared to Fixed Switching Tables IZAGZAOUN Mohamed, AIT EL KADI Youssef
663910	A Hybrid Anomaly Detection Framework for Vibration-Based Monitoring of Mechanical Systems Mouad BHIH, Mohamed LAMANE, Zouhair Elamrani Abou El Assad, Mohamed TABAA, Abdelhakim El Boustani

Room 3 ID	Session 12 : Intelligent Systems and Advanced Technologies Thursday, November 27, 2025 - 15h15 - 17h15 Moderators: Pr. NEJMI Ali, Pr. ABOUNADA Abdelouahed Pr. BENCHAGRA Mohamed, Pr. LAKHAL Yassine
663976	Machine Learning-Based Prediction of Moroccan Crop Yields with Drip Irrigation FAKIR Youssef, FAKIR Weam, EL AYACHI Rachid
651417	A contribution on active attack detection in discrete-event systems Msaaf mohammed, Fri mohamed, Soundouss halima , Ghajdami meriam
660830	Geometrical Trajectory Planning Algorithm for Autonomous Mobile Robots under Kinematic Constraints SOUNDOUSS Halima, FRI Mohamed, MSAAF Mohammed, BELMAJDOUB Fouad
663597	Deep Learning in Mammographic Breast Cancer Diagnosis: A Review EL GHANAOUY Faouzi Ayoub, JETTI Mohamed, ANIQ Elmehdi, CHAKRAOUI Mohamed, KHOUDIFI Youness

Room 1 ID	Link : https://meet.google.com/xit-xdkt-ama Session 13 (Virtual) : Intelligent Systems and Advanced Technologies Friday, November 28, 2025 - 10h30 - 12h15 Moderators: Pr. REHHALI Khaoula, Pr. ALLAOUI Ali, Pr. TOUAIRI Souad, Pr. AIT EL KADI Youssef
661164	Comparative Evaluation of LCL Filter Damping Strategies in Bidirectional EV Onboard Chargers Anas DIOURI, Mohamed KHAFALLAH, Abdelilah HASSOUNE and Moham med Amine MESKINI
661251	AI-Powered Tongue Diagnosis: Integrating MobileNetV3 and Traditional Chinese Medicine for Renal Disorder Detection Naim mohamed, Zeguendry amine, Elabsi mohamed Anoir, Benlaktib yassine, Amdjar abdelwahid
661266	IA-Med: A Machine Learning-Based System for Disease Prediction and Personalized Health Guidance with Conversational Support EL OUAHI Najat, ZEGUENDRY Amine, HADIGUI Nessaiba, HAILALA Yassmin, HANOUNA Chaimae
662647	Multi-Category Semantic Segmentation on CT-Scans Using Deep Neural Networks ISSAME Imad, ZEGUENDRY Amine, AGOUMI Amine
661260	TUBER-ENSEMBLE: An Ensemble of Deep Convolutional Neural Networks for Tuberculosis Detection from Chest X-rays KISSANE Mohssine, ZEGUENDRY Amine, AHKOUK Walid, DAHOU Abdelilah

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VILNIUS GEDIMINAS TECHNICAL
UNIVERSITY, LITHUANIA



DR. MOHAMMED ALI JALLAL
SIDI MOHAMED BEN ABDELLAH UNIVERSITY
MOROCCO & EX-RESEARCHER AT CEA FRANCE

We are delighted to invite esteemed experts in their respective fields to serve as keynote speakers at the ACMCST - International Conference on Advanced Communications with Modern Circuits and Systems Technologies

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