SITA'25

15Th International Conference on Intelligent Systems: Theories and Applications

SITA'25

Program

October 20-21, 2025, ENSIAS, Rabat, Morocco

Preface

Intelligent Systems Theories and Applications - SITA is a major international scientific event organized in order to present, discuss and disseminate the theories and applications of intelligent systems. It is the result of fruitful cooperation between many universities and institutions. This conference brings together leading scientists, researchers and academics in Intelligent Systems from around the world.

The international conference on Intelligent Systems: Theories and Applications (SITA'25) will be organized and held at Ecole Nationale Supérieure d'Indormatique et d'Analyse des Systèmes (ENSIAS), Rabat, Morocco, on October 20 – 21, 2025. It is the fifteenth in the series of previous editions that have been held since 2001 with the collaboration of: Institut National des Postes et Télécommunications(INPT), Faculté des Sciences et Techniques de Mohammedia (FSTM)and École Mohammadia d'Ingénieurs(EMI).

SITA'25 conference aims at presenting the latest research works dealing with up-to-date and emerging theories of Intelligent Systems using connectionist and symbolic approaches (Knowledge Based Systems, Soft Computing, Fuzzy Logics, Neural Networks, Genetic Algorithms, etc.) together with their applications in different engineering fields: Artificial Intelligence, Computing, Telecommunications, Networking, Robotics, Manufacturing, Data Mining, Image, Video and Audio Processing, Pattern Recognition. Emphasis will be particularly laid on the contribution of these new theories in solving the complex problems that many scientific and industrial communities encounter.

This edition, as well as for the previous ones, are very successful in attracting students since it offers them a platform to exchange their ideas with experts invited from overseas. Based on these editions, some fruitful collaborations were even launched between some Moroccan institutions, European and Canadians ones which have been appreciated by students and their supervisors. To serve the local community much further and to promote research within the whole north Africa region and beyond, SITA'25 will provide a forum for exchanging ideas, discussing solutions, and sharing experiences among researchers and professionals from both academia and industry interested in intelligent systems including theories and applications.

Welcome Message from the General Chair

It is my great pleasure to welcome you to the international conference on intelligent systems: theories and applications (**SITA 2025**), **ENSIAS, Rabat, Morocco**. SITA is an international scientific event and one of the largest gatherings of researchers and industry professionals in the field of intelligent systems.

In recent decades, intelligent systems have fundamentally transformed our live. The technology itself is progressing and exploring new horizons. The participants in SITA 2025 will discuss and present the latest advances in this field including diverse topics ranging from artificial intelligence, software engineering, data integration, machine learning, to telecommunication and networking. Contributions to the conference will provide a significant improvement, compared to the state-of-the-art, to the design, analysis, and operations of intelligent systems, either by offering new insights on theoretical aspects as well as by proposing novel practical methods and Tools.

Organization of such international conference would not be possible without the dedicated efforts of many individuals. The SITA 2025 is indebted to hundreds of volunteers who contributed to the various aspects of the conference. In particular, the Technical Program Committee and the Chairs completed a peer-review process, selected comprehensive and high-quality papers, and established the SITA'25 program.

This program is enhanced and complemented by a number of Keynote Sessions. Finally, the chairs of SITA'25 would like to thank the sponsors in particular, Mohammed V University in Rabat, ENSIAS, IEEE, ARNT and all supporters for their contribution to the conference.

It has been a great privilege for us to serve as the Chairs of SITA 2025. We hope that you find the conference stimulating, fulfilling and enjoyable. Thank you for your support of SITA and your attendance, and wish you a pleasant experience in Rabat city and SITA 2025.

Ahmed ZELLOU
ENSIAS, Mohammed V University In Rabat, Morocco

Ali IDRI
ENSIAS, Mohammed V University In Rabat, Morocco

Laila CHEIKHI
ENSIAS, Mohammed V University In Rabat, Morocco

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SITA'25

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Keynote Speakers

Professor Bernadette Bouchon-Meunier, CNRS-Sorbonne University.

Title: On the Forms of Consciousness in Artificial Systems

Abstract: Consciousness is a multifaceted and deeply complex concept. The debate over whether an intelligent system can possess consciousness has persisted for decades, yet it has gained renewed urgency with the rise of AI systems capable of engaging with humans in strikingly natural ways. We explore different dimensions of consciousness, ranging from phenomenological consciousness (linked to perceptions) to access consciousness (giving us information about one's actions). The foundations for machine self-awareness were laid as early as 1982, when Marvin Minsky proposed that equipping systems with introspective capabilities—the ability to analyze their own functioning—could lead to self-conscious systems. This vision evolved in 2009 when Jacques Pitrat claimed that an artificial agent monitoring and regulating its own thought processes could articulate its reasoning to foster human acceptance, a concept that predates and perfectly complements today's Explainable AI (XAI) paradigm. A recent study provided a list of indicator properties derived from scientific theories to assess consciousness for an intelligent system. Building on these foundations, we examine key characteristics of AI consciousness that may be different from human consciousness. We explore the extent to which current or future systems could possess such forms of consciousness, as well as the potential benefits and drawbacks.

Short Biography: Prof. Bernadette Bouchon-Meunier is a CNRS Director of Research Emeritus at Sorbonne University and former head of the Database and Machine Learning department in the Computer Science Laboratory of the University Pierre et Marie Curie-Paris 6 (LIP6). She is the Editor-in-Chief of the International Journal of Uncertainty, Fuzziness and Knowledge-based Systems and has been co-Executive Director of the biennial IPMU international conference since 1986. B. Bouchon-Meunier has (co-)edited 32 books and (co-)authored five. She served as President of the IEEE Computational Intelligence Society (2020–2021) and is a Life Fellow of the IEEE and a Fellow of the International Fuzzy Systems Association. She received the EUSFLAT Scientific Excellence Award (2017), the IEEE CIS Fuzzy Systems Pioneer Award (2018), and the IEEE Frank Rosenblatt Award (2024).

Professor Tomas Ward, Dublin City University.

Title: Signals, Selves, and Systems: AI for Modelling Cognition in Humans and Machines

Abstract: How do we come to understand minds — our own, others', and now, those of machines? This talk traces a scientific journey through the evolving landscape of human-centred measurement and modelling. Underpinned by developments in machine learning we start by examining brain-computer interfaces and physiological sensing, where we seek to make internal states such as stress, focus, and intention visible and actionable through signals from the body. Next in recognition that human experience isn't just captured through heartbeats and brainwaves but is also expressed in decisions, language and behaviour we examine how emerging specialist fields such computational psychiatry can leverage ideas from machine learning to reveal structure in how we behave and respond to uncertainty. Here AI is used to not only to detect mental health conditions, but to model the cognitive processes that underlie them. In a final twist I want to share about our recent efforts in which the very tools we developed to model humans have proven useful for understanding the new class of intelligent agents we are building. Techniques from cognitive science and psychiatry are now being used to interpret, align, and audit AI systems revealing that human and machine minds may not be so different after all.

Short Biography: Prof. Tomas Ward is the AIB Professor of Data Analytics at Dublin City University (DCU) and the DCU Site Director of the Insight Research Centre for Data Analytics. His expertise spans biomedical engineering, artificial intelligence, and digital health technologies. Prof. Ward holds a BE in Electronic Engineering, an MEngSc in Rehabilitation Engineering, and a PhD in Biomedical Engineering, all from University College Dublin. He began his career coordinating engineering research at the National Rehabilitation Hospital before transitioning to academia, holding roles at Maynooth University before joining DCU in 2018. At DCU, he founded the AI for Better Living research group, focusing on AI and machine learning for health, behaviour tracking, and decision-making in real-world settings. His industry experience includes serving as VP of Engineering at Qusp Inc. in San Diego, leading the development of real-time neural signal processing platforms. He has also held visiting research positions at prominent international institutions, including ATR in Japan, Tsinghua University in China, and the University of California, San Diego. Prof. Ward's research has pioneered functional near-infrared spectroscopy (fNIRS) for brain-computer interfaces, non-contact optical sensing for vital signs, and privacy-preserving AI for wearable blood pressure monitoring and virtual sensing applications. His current research is focussed on AI agents, their alignment and adoption in behavioural change paradigms and the development of supporting regulatory guidelines for their use in software as a medical device. He is a strong advocate for open science, having curated influential datasets to enhance reproducibility in AI research. Beyond academia, he has led multiple commercialization efforts, co-founding startups in AI-driven clinical trials and infrastructure monitoring. A passionate advocate for STEM outreach, he co-founded Dublin Maker and regularly incorporates artists in residence to enhance outreach and communication of his work.

Topics

The SITA'25 topics include but are not limited to:

Artificial Intelligence
Big Data Analytics
Cloud and Edge Computing
Cyber-Security and Information Security Systems
Data and Software Quality
Data Mining, Data Warehousing and Knowledge Management
Decision Support Systems
Distributed Platforms, Middleware, and Computing Paradigms
E-Health
Embedded Systems, Cyber-Physical Systems, and Internet of Things
Explainable Artificial Intelligence
Green and Sustainable ICT Development
Intelligent Software Engineering
Interoperability and Integration
Multi-Agent Systems
Multimedia Communications and Processing
Natural Language Processing
Neural Computing
Reasoning under Uncertainty
Software Engineering
Speech and Image Processing
Web Mining and Web Semantics

General Program

Monday, October 20, 2025	
8h00-9h00	Registration
9h00-9h30	Opening Ceremony
9h30-10h30	Keynote 1
10h30-11h00	Coffee Break
11h00-12h45	Session 1: Applicative –AI -I
	Session 2: Software Engineering –I
12h45-14h15	Lunch
14h15-16h00	Session 3: Cybersecurity –I
	Session 4: eHealth – Computer Vision -I Sponsored by AIDA Project (Al Khawarizmi Program)
	Session 5: Remote I
16h00-16h30	Coffee Break
16h30-18h15	Session 6: Machine learning- NLP-I
	Session 7: Industry 4.0
	Session 8: Remote II

Tuesday, October 21, 2025	
9h00-10h00	Keynote 2
10h00-10h30	Coffee Break
10h30-12h15	Session 9: Applicative – AI- II
	Session 10: Machine Learning - I
	Session 11: eHealth – NLP Sponsored by AIDA Project (Al Khawarizmi Program)
12h15-13h45	Lunch
13h45-15h30	Session 12: Cybersecurity - II
	Session 13: eHealth – Computer Vision –II Sponsored by AIDA Project (Al Khawarizmi Program)
	Session 14: Machine Learning – NLP- II
15h30-16h00	Coffee Break
16h00-17h45	Session 15: Machine Learning - II
	Session 16: Supply Chain
	Session17: Software Engineering - II
17h45-18h30	Awards distribution and Closing

Detailed Program

Monday, October 20, 2025

8h00-9h00: Registration

9h00-9h30: Opening Ceremony

9h30-10h30 (Grand Amphi)

Keynote 1: Prof. Bernadette BOUCHON-MEUNIER, CNRS-Sorbonne University

Title: On the Forms of Consciousness in Artificial Systems

Chair: Mohammed RAMDANI (FST, Mohammedia)

10h30-11h00: Coffee Break

11h00-12h45: *Session 1* – Applicative –AI - I *(Amphi I)*

***Chair:* *Abdelaziz* BERRADO (EMI, Rabat)**

ID62	A Data-Driven Framework for Performance Benchmarking in Football Using Normalized Expected Goals (xG) Metrics. Tawfiq Zaitouni, Karim Hassani, Khalid Bahani, Mohammed Ramdan
ID118	A Hybrid AHP-TOPSIS Multi-Criteria Model for Selecting the Most Competitive Soccer Season in Morocco Khalid Cherkaoui Rbati, Jaafar Atifi, Mohamed Lahby
ID139	Optimizing Non-Life Insurance Technical Reserves: The Contribution of Neural Networks under the Solvency II Directive Abdelilah Belabed, Karim Doumi, Oussama Merzguioui
ID140	The Impact of Integrating Artificial Intelligence Techniques into Data Fusion for Wireless Sensor Networks: A Systematic Literature Review Sabah El Moutaouakil, Hatim Kharraz Aroussi
ID143	Towards Intelligent Project Management in the Finance Sector: A Scoping Review of AI Use Cases Styve L. Ndjonkin Simen , Simon P. Philbin, Bidur Khanal, Gordon Hunter
ID152	Design and stabilization of uncertain T-S fuzzy systems via fuzzy controller and fuzzy observer Kaoutar Lahmadi, Khaddouj Ben Meziane

11h00-12h45: ***Session 2 – Software Engineering - I (Amphi II)***

Chairs: **Karima MOUMANE (ENSIAS-Rabat), Brahim RAOUYANE (UH2 -Casa)**

ID22	MAGISTER: LLM-Based Test Generation with Role-Specialized Agents Abdellatif Ahammad, Manal El Bajta, Maryam Radgui
ID37	Automated Assessment and Enhancement of User Story Quality Using Large Language Models in Agile Development Samia Lotfi, Khalid Nafil
ID38	The Evolving Role of Large Language Models in UX Design: A Bibliometric Analysis Study Ilhame Oudor, Khalid Nafil
ID41	Balancing Agility and Compliance: Application of AHP method in Game Theory for Regulatory Airborne Software Development Imane Rhouas, Khalid Nafil
ID66	The Evolution of Ontology Merging: Historical Perspectives and Modern Approaches Naoual Smaili, Adil Kabbaj
ID88	Automatic Enrichment of Biometric Databases with Metadata Using LLMs Maha Zerroug, Mohamed Radouane

12h45-14h15: **Lunch**

14h15-16h00: ***Session 3 – Cybersecurity - I (Amphi I)***

Chair: **Mohamed KISSI (FST-Mohammedia)**

ID8	A Survey of Energy Efficiency for Kubernetes Clusters Mohamed Laharraf, Hamza Kamal Idrissi Hamza, Driss Allaki
ID90	Similarity and ML Models for Supercomputers Workload Forecasting Soraya Zertal, Tom Macard, Sophie Willemot, Sebastien Gougeaud
ID93	Cybersecurity in Robotic Telesurgery Securing Robot-Console Communications for Safe Remote Surgery Yassine Gounine, Khalid Minaoui, Mohamed Elaroussi
ID97	Enhancing Energy Efficiency through Kubernetes Scheduling Techniques Aneeq Malik, Ali Syed, Syed Muhammad Sheraz, Hassan Sohail, Sabih ur Rehman, Rao Faiq
ID127	Attack Identification in Industrial Control Systems Using TabNet Karima Hassini, Mohamed Lazaar

14h15-16h00: ***Session 4 – eHealth-Computer Vision- I*** ***(Amphi II)***

This session is sponsored by the AIDA Project (Al Khawarizmi Program)

Chairs: **Moulay Hafid EL YAZIDI (ENSIAS-Rabat), Mohamed RADOUANE (ENSIAS-Rabat)**

ID113	LoTAS: A Novel Activation Function for Deep Neural Networks Kaouthar Merzouki, Omar Souissi
ID11	A GNN-Based Approach for Multi-Class Spinal Canal Stenosis Severity Prediction Khadija El Azzouzi, Lamia Benhiba, Kawtar Tikito
ID16	A Hybrid Approach Using CNN Feature Extraction and SVM/XGBoost for Lung Nodule Classification Mouna Ajaani, Mohamed Radouane
ID27	Quantum Machine Learning for Anomaly Detection in Brain Imaging Related to Mental Health. Mouna Kettani, Aya Rguig, Fouad Mohammed Abbou, Farid Abdi, Lamiae Bouanane, Mohamed Bouhadda
ID48	Comprehensive Comparative Analysis of State-of-the-Art Medical Vision-Language Models: LLaVA-Med, VILA-M3, and BiomedCLIP Performance Evaluation on Chest Radiography Datasets Tarik Laaouane, Mohamed Radouane
ID65	Using Novel Fundus Image Preprocessing to Improve the Classification of Retinopathy of Prematurity (ROP) Using Deep Learning Sajid Rahim, Kourosh Sabri, Anna Ells, Alan Wayssyng, Mark Lawford, Lingyang Shu
ID77	Deep Learning Based Techniques for Medical Ultrasound Images Enhancement: A comprehensive review Chaymae Taib, Zineb Aqachmar, Najiba El Amrani El Idrissi

14h15-16h00: ***Session 5 – Remote I***

Chair: **Ibtissam ABNANE (ENSIAS-Rabat)**

Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWEyZGI3NjctMTg5Zi00YzliLTk5NjctMmZlMmQyMDhjMjFi%40thread.v2/0?context=%7b%22Tid%22%3a%22a99950fd-2582-4f30-916e-fc061b7a258b%22%2c%22Oid%22%3a%22af5c76d9-1fb3-4c11-8604-9b5682d70b08%22%7d

ID150	Real Time Child Abduction and Detection System Tadisetty Sai Yashwanth, Yangalasetty Sruthi Royal, Vankayala Rajeshwari Shreya, Mayank Kashyap, Divyaprabha K N
ID26	Accelerated MRI Reconstruction: Evaluating Physics-Informed Sampling Against Learning-Based Methods Patrick Vincent, Manoj Kumar
ID59	AD-TTS: A Multi-Task Simulation Framework and Dataset for Event Prediction in Time-Triggered Autonomous Driving Dongchen Li, Daniel Onwuchekwa, Roman Obermaisser

ID32	NanoRULNet: An Efficient and Interpretable Deep Learning Framework for Remaining Useful Life Prediction in Smart Manufacturing Aman Sharma, Kwan Yong Sim, Sivachandran Chandrasekaran
ID110	Inventory management using physics informed machine learning Ali Hamad Bakar, Manoj Kumar
ID21	Generalized Passive Face Liveness Detection Using Region-Specific Mixture-of-Experts Takua Mokhamed, Manar Abu Talib, Qassim Nasir, Sohail Abbas

16h00-16h30: Coffee Break

16h30-18h15: *Session 6 – Machine learning- NLP-I (Amphi I)*
***Chairs:* Omar EL BEGGAR (FST, Mohammedia), Taoufik RACHAD (ENSIAS-Rabat)**

ID6	Elevating Legal Understanding: A Dedicated Instruction Dataset and an Optimized LLM for Legal Information Extraction to Support the Juridical Interpretation of Marine Environmental Law Youssef Al Mouatamid, Marie Bonnin, Jihad Zahir
ID40	The Power of Context: A Comparative Study of Transformer-based, Recurrent, and Traditional Models for Sentiment Analysis El mehdi Lghaouch, Zineb Fandi, Soumaya Ounacer, Soufiane Ardchir, Mohamed Azzouazi
ID80	Large Language Models and Non-Player Characters in Gaming: A Bibliometric Overview Hoda Elmgadmi, khalid Nafil
ID102	MEGA-Score: Meta-learning for Essay Scoring with Generalization across Assessment Prompts Soumia Ikiss, Najima Daoudi, Mostapha Bellafkih
ID145	Neuro-Symbolic Commonsense Reasoning: A First-Order Logic and Sub-Symbolic Embeddings Framework with Depth-Limited Search Bryce Shurts, King-Ip Lin
ID148	Advancing Turkish Readability Assessment with Multi-Layer Linguistic Features and Ordinal-Aware Deep Learning Özkan Aslan, Caner Balım, Naim Karasekreter

16h30-18h15: ***Session 7 – Industry 4.0 (Amphi II)***

Chair: **Naoual CHAOUNI BENABDELLAH (ENSIAS-Rabat)**

ID4	Explainable Deep Learning Classifier for Residential Water Leaks Mohammed Laouadi, Mohamed Kissi, Omar El Beggar
ID46	Intelligent Monitoring of Data Center Physical Infrastructure: A Comprehensive Literature Review Mehdi Seridi, Samira El Margae, Mohamed El Aroussi
ID52	A Modular Architecture for Agentic Decision-Making in Industrial Analytics Achraf Ballari, Omar Souissi
ID151	On the impact of Filter based Feature Selection for Machine Learning based IDS in OT systems Oumaima Benrhennou, Fahd Kalloubi
ID61	Memory-Augmented Transformer Architecture with Graph-Based Attention for Network Intrusion Detection on Imbalanced Data Youssef Bounou, Iyad Lahsen-cherif, Omar Ait Oualhaj, Mostapha Bellafkih

16h30-18h15: ***Session 8 – Remote II***

Chair: **Ibtissam ABNANE (ENSIAS-Rabat)**

Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_NWEyZGI3NjctMTg5Zi00YzliLTk5NjctMmZlMmQyMDhjMjFi%40thread.v2/0?context=%7b%22Tid%22%3a%22a99950fd-2582-4f30-916e-fc061b7a258b%22%2c%22Oid%22%3a%22af5c76d9-1fb3-4c11-8604-9b5682d70b08%22%7d

ID30	Multimodal Cultural Heritage Architectural Style Classification for Residential Buildings in the UAE Based on CLIP Embeddings and SVM Ahmed Ammar Kubba, Manar Abu Talib, Iman Ibrahim, Qassim Nassir
ID14	ZKP-E-Vote: A Scalable, Receipt-Free and Coercion-Resistant Blockchain Framework for National-Level Electronic Elections Saud Sultan Al Qasimi, Qassim Nasir, Manar Abu Talib
ID36	A Hybrid Machine Learning and TOPSIS-Based MCDM Framework for Optimized Inventory Classification Raghad Albarghash, Manar Abu Talib, Talel Ladhari, Mehdi Jemmali
ID119	Methodologies in Game Theory for Optimizing Collaboration in Microservices Mouhcine Boutinzer, Hatim Guermah
ID29	Generative AI Ethics and Security Oumaima Ferhat, Ilham Slimani
ID124	Comparative Analysis of Data Augmentation Techniques for Imbalanced Water Quality Classification: Prioritizing Public Safety through Enhanced Minority Class Detection Manal Mounir, Mohamed Yassin Chkouri, Yasser El Khamlichii, Abdellah Touhafi

Tuesday, October 21, 2025

9h00-10h00 (Grand Amphi)

Keynote 2: Professor Tomas WARD, Dublin City University

Title: Signals, Selves, and Systems: AI for Modelling Cognition in Humans and Machines

Chair: Ali IDRI (ENSIAS, Rabat)

10h00-10h30: Coffee Break

10h30-12h15: *Session 9 – Applicative –AI-II* (Amphi I)

Chair: **Soumia ZITI (FS-Rabat)**

ID5	A Roadmap for Multimodal Fusion in IoT-Enabled Context-Aware Recommender Systems Mohamed El Amine Chafiki, Oumaima Stitini, Soulaimane Kaloun
ID10	Towards Natural Representation of User Preferences: A Graph Neural Network Approach to Recommender Systems Khaoula Belaroui, Habib Ayad
ID35	Detecting Applicant Dropout in Job Applications: A Data-Driven ML Framework Fatima Zahra Abbour, Soufiane Ardchir, Soumaya Ounacer, Mohamed Azzouazi
ID79	Fusion of Head Pose and Facial Action Units for Automated Student Engagement Estimation: A Study on DAD-3DHeads Fatima Zahra Jobbid, Aissam Berrahou, Hassan Berbia
ID132	Equity and Precision in Educational Assessment: Raw Scores to Compute Final Grades Analysis Naoual Chaouni Benabdellah, El-Mehdi Aqrchal
ID136	A Data-Driven Approach to Exploring Learner Input Preferences in E-Learning Khalid Benabbes, Abdelhakim Diouani, Ahmed Zellou, Khalid Housni, Ali El Mezouary, Samir El kaddouhi, Bahaa Eddine Elbaghazaoui

10h30-12h15: *Session 10 – Machine Learning – I* (Amphi II)

Chair: **El Mehdi KANDOUSSI (INPT-Rabat)**

ID13	Gamification Empowered by LLM-Based Agents: A Systematic Literature Review Meryem Boubakri, Khalid Nafil
ID24	Exploring the Impact of Optimization Algorithms in Federated Learning under Non-IID Contexts Asmae Ananouch, Hamid Khalifi, Faissal Ouardi
ID44	A Scalable Soil Moisture Sensor using LSTM and Random Forest Mohammed Flissat, Mohammed Elaroussi
ID54	ML for Insurance Risk Prediction: Models, Metrics, and Insights with a Graph-Causal-Transformer Approach

	Hamza Errahibi, El mehdi Lghaouch, Fatima Zahra Abbour, Chemlal Yman, Mohamed Azzouazi
ID57	CNN vs Transfer Learning for Enhancing Spectrogram Classification of Baby Cries Meriem Ghanjaoui, Daaif Abdelaziz, Elyoussfi Mohamed
ID104	Review of Breast Cancer Datasets and Repositories: Emphasis on Longitudinal Component Ismail Chitaouy, Maïssae Haddouchi, Abdelaziz Berrado

10h30-12h15: ***Session 11 – eHealth- NLP (Salle L30)***

This session is sponsored by the AIDA Project (Al Khawarizmi Program)

Chairs: **Khadija LETRACHE (FST-Mohammedia)**

ID31	Leveraging IBM Tools and Social Media Insights for Postpartum Depression Prediction Chaimaa Lamharmech, Khadija Achtaich, Rachida Ait Abdelouahid, Abdelaziz Marzak
ID72	Multi-Label Clinical Text Classification under Class Imbalance: A GRU-Based Study on MIMIC-III Manale Chakir, Naji Abdelwahab
ID75	Literature Review of AI Models for Medical Text Processing with Comparative Evaluation of Selected Transformers Hasnae Tabassi, Hayat Sedrati, Abdellah Yousfi
ID83	Pathological-to-Healthy Speech Conversion Using Continuous-Time Neural Modeling Salma Chlaikhy, Adil Chakhtouna, Abdellah Adib
ID106	Multi-label Biomedical Text Classification of Abstracts According to the Hallmarks of Cancer Zouhair El-Azizy, Lhoussain Aouragh, Said Ouatik El Alaoui
ID116	Use, Performance, and Limitations of Large Language Models in Mental Health: a systematic review Ikram Amine, Imane Lmati, Houda Anoun, Fatimazahra Ammor
ID71	Forecasting Data Server Energy Consumption Using LSTM Deep Learning Models Assia Taifi, El Mehdi Kandoussi, Mostafa Bellafkih

12h15-13h45: **Lunch**

13h45-15h30: ***Session 12 – Cybersecurity – II (Amphi I)***

Chair: **Mostafa BELMEKI (INPT-Rabat), Oussama SBAI (FS-Rabat)**

ID12	Building a Proactive Cybersecurity Defense: Detection and Analysis Strategies Abbass Wissam , Zineb Bakraouy , Anas Abou El Kalam, Loubna El Haloui, Amine Baina, Mostafa Bellafkih
ID64	Hybrid NIDS Architecture Leveraging Suricata, Zeek, and the ELK Stack Zineb Bakraouy, Wissam Abbass, Manale Boughanja, Amine Baina, Mostapha Bellafkih
ID101	From Clusters to Classifiers: A Unified Framework for Multi-Class IoT Threat Detection Mehdi Moucharraf, Mohammed Ridouani, Fatima Salahdine, Naima Kaabouch

ID144	Robust Intrusion Detection Framework Using Diffusion Model Data Augmentation and Hybrid Feature Selection Safae Khalis, Mohammed Chemmakha, Mohamed Lazaar
ID146	Toward a New Approach Based on Conditional Tabular Generative Adversarial Network for Ransomware Attack Detection in IoT Systems Zhor Ismaili, Omar Habibi, Mohammed Chemmakha, Mohamed Lazaar
ID2	Toward Resilient Distributed Systems: A Survey of Failure Prediction Ilyass Tarhri, Driss Allaki, Hamza Kamal Idrissi

13h45-15h30: ***Session 13 – eHealth- Computer Vision- II (Amphi II)***

This session is sponsored by the AIDA Project (Al Khawarizmi Program)

Chair: **Amine BAINA (INPT-Rabat)**

ID15	Vision-Based Action Monitoring in Assistive Robotics: Benchmarking Models for Elderly Safety Oumaima Gundoul, Youness Tabii, Rachid Oulad Haj Thami, Meftah Ghrissi, Wiam Fadel
ID39	Integrating Artificial Intelligence and Game Theory for Strategic Decision-Making in Cancer Therapy Karima Dadda, Raddouane Chiheb
ID67	Profiling of Tobacco Consumers in Eastern Mediterranean Region Meriem Aabad, Taoufik Rachad
ID69	A GIN-LightGBM Integrated QSAR Approach for Anti-HIV CCR5 Inhibitor Activity Prediction Ikram Rajai, Houda Labjar, Barakat Oussama, Mohamed Kissi
ID107	Synergistic Deep Learning Approaches for Pancreatic Cancer Diagnosis: Comparative Analysis of CNN Architectures and Multimodal Data Fusion Youssef Boughdad, Majdoulayne Hanifi, Boutaina Hdioud, Rachid Oulad Haj Thami
ID115	Evaluation of Open-Source Small Vision–Language Models for Medical Prescriptions Understanding Yasine Lehmiani, Saad Frihi, Abdehak Mahmoudi

13h45-15h30: ***Session 14 – Machine Learning- NLP- II (Salle L30)***

Chair: **Karim DOUMI (FSJESR-Rabat)/Omar AIT OULHAJ (INPT-Rabat)**

ID28	A Hybrid Architecture for Urban Planning Decision Support Using Data-Driven Analysis and NLP: A Use Case in Nouakchott, Africa Mariem Bounabi, Seyid Abdellahi Ebnou Abdem, Rida Azmi, Mohammed Hlal, Elbachir Diop, Jérôme Chenal
ID53	Multimodal Arabic Sarcasm Detection Using CNN and BiLSTM Ayoub Ben Cheikhi, El Habib Nfaoui
ID94	Arabic Handwriting Recognition at Line-Level: A Comprehensive Review and Hybrid Modeling Strategy Omar Arjafellah, Abdellah Yousfi, Azhar Hadmi

ID100	Machine Translation of dialects into Standard Arabic: A Systematic Review and Comparative Analysis Hafsa El faida, Abdellah Yousfi
ID108	Enhancing ASR for Moroccan Darija Using Transformer Models Abdelkarim Agoujil, Abdellah Youssfi
ID131	Low-Resource RAG Pipelines for Arabic Domain-Specific Corpora Abdelkrim Aarab, Ahmed Oussous, Mohammed Saddoune
ID138	A Systematic Literature Review on Automatic Correction for Arabic Text using Language Models and Deep Learning Asmae Regraguy, Saida Laaroussi, Lhoussain Aouragh, Said Ouatik El Alaoui

15h30-16h00: Coffee Break

16h00-17h45: *Session 15 – Machine Learning - II* *(Amphi I)*

***Chair:* Brahim AIT SKOURT (ENSIAS-Rabat)**

ID55	Towards a Multi-Agent System Based on LLM and RAG for Automated and Customizable Urban Diagnostics Rida Azmi, Seyid Abdellahi Ebnou Abdem, Mariem Bounabi, Jerome Chenal, Mohammed Hlal, El Bachir Diop
ID20	Iterative Ensemble Threshold Selection in Branch CNNs for Efficient Image Classification Azizi Abdullah, Diah Arianti, Shahnorbanun Sahran
ID85	A Comparative Benchmark of CNN-LSTM architectures for Human Action Recognition with DWT and CLAHE-DWT Preprocessing Nadia Idrissi Zouggari, Mohamed Radouane
ID86	A novel approach based on CNN and ICA for the detecting and removing of PLI artifact from the sEMG signals Mohamed Ait Yous, Said Agounad, Siham Elbaz
ID121	Fake Review Detection on Online Platforms Using Machine Learning: A Comparative Study Achraf Zahid, Nawal Sael
ID129	Pervasive Seizure Detection via One-Class EEG Modeling with Visual Insights Anqi Shen, Ailun Shen
ID133	Informed Prior Initialization for Bayesian Convolutional Neural Networks Through Deterministic Pre-training Mostafa Bakhouya, Hassan Ramchoun

16h00-17h45: ***Session 16 – Supply Chain (Amphi II)***

Chair: **Widad ELOUATAOUI (ENSIAS-Rabat)**

ID128	Smart Tutoring Systems in Education 4.0: A Systematic Review Mohamed Lafham, Essaid El Bachari
ID58	Current Machine Learning Applications in Road Safety Monitoring: A Comprehensive Review Ilyas Modni, Zoubida Chorfi, Abdelaziz Berrado
ID89	A review on Smart Supply Chains : State-Of-the-Art and opportunities Khalid Aouad, Fatima Ouzayd
ID147	Comparative Analysis of LSTM and LightGBM Applied To Arrival Air Traffic Delay Prediction Soufiane Momtaz, Otmane Idrissi, Abdelmajid Bousselham, Mohammed Mestari
ID153	Toward the Decarbonization of Maritime Supply Chains: A Ship Emissions Prediction Framework Abdelhak El Aissi, Ismail Bourzak, Loubna Benabbou, Abdelaziz Berrado

16h00 - 17h 45: ***Session 17 – Software Engineering - II (Salle L30)***

Chair: **Khalid NAFIL (ENSIAS-Rabat)**

ID109	Toward a Best Practices Model for Web Accessibility in E-Government Portals Mohammed Rida Ouaziz, Laila Cheikhi, Alain Abran
ID120	Intelligent autoscaling strategies for cloud-native Microservices: A systematic review Othmane Zarai, Zineb Mcharfi, Bouchra El Asri
ID122	Usability Assessment of a Mobile Application for Promoting Adherence to Speed Limits Abderrahim El Hafidy, Taoufik Rachad
ID123	Feature Selection in Artificial Neural Network-Based Software Development Effort Estimation: A Systematic Mapping Study Elhoussaine Enoumayri, Fatima Azzahra Amazal, Fatima Ezzahra Boujida
ID130	Design, Implementation, and Evaluation of an LLM-powered System for Automatic API Generation according to OpenAPI Specification Adnane Kesraoui, Omar Iraqi Houssaini, Asmae Mourhir
ID96	Reinforcement Learning for Dynamic RDF Schema Evolution in NoSQL Databases Saad Belefqih, Mohammed Barchane, Ahmed Zellou, Elhabib Benlahmar

17h50-18h30: Awards distribution and Closing

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