



Faculty of Mathematics and
Computer Science



Laboratory of Informatics
and its Applications of M'sila

Laboratory of Informatics and Its
Applications of M'sila (LIAM)

People's Democratic Republic of Algeria
Ministry Of Higher Education and Scientific Research



2nd International Workshop on Machine Learning and Deep Learning (WMLDL 2025)



University Mohamed Boudiaf M'sila



Artificial Intelligence House of M'sila

Program of WMLDL 2025, November 25, 2025

Tuesday 25 November 2025	08:00 - 09:00	Registration				At Ibn El Haytham Auditorium	
	09:00 - 09:45	Opening Ceremony				At Ibn El Haytham Auditorium	
	09:45 - 10:45	Keynote : Artificial Intelligence for Image & Video processing By : Pr. Aïssa Boulmerka (National School of Artificial Intelligence (ENSIA) in Algiers, Algeria) Chair : Pr. Samir Akhrouf (University of M'sila, Algeria)				At Ibn El Haytham Auditorium	
	10:45 - 11:15	Coffee Break				At Ibn El Haytham Auditorium	
	11:15 - 12:15	Keynote : Fundamentals and Frontiers in Machine Learning By : Pr. Samir Brahim Belhaouari (Hamad Bin Khalifa University , Qatar) Chair : Pr. Bilal Atallah (University of M'sila, Algeria)				At Ibn El Haytham Auditorium	
		Session 1 : ML&DL Applications: Drug Discovery, Education Chairs : Pr. Farid Nouioua (Univ. El-Bachir El-Ibrahimi BBA) & Dr. Brik Youcef (Univ. Mohamed Boudiaf M'sila) Room : Conference Room, 1st floor (Incubator Center)		Session 2 : Machine Learning Algorithms, Models, and Systems Chairs : Pr. Aïssa Boulmerka (ENSIA, Algiers) & Pr. Bourahla Mustapha (Univ. Mohamed Boudiaf M'sila) Room : Expo Room, 1st floor (Incubator Center)		Session 3 : ML&DL Applications: Behavioral Analysis Chairs : Dr. Mahmoud Brahimi (Univ. Mohamed Boudiaf M'sila) & Dr. Ahcene Abed (Univ. M'sila) Room : CATI Room, 1st floor (Incubator Center)	
	12:30 - 12:45	13	Machine Learning for Drug Discovery: A Case Study on Classifying Ligand Activity for the 5-HT ₂ C Receptor Elmir Hassen*; Ghazli Abdelkader; Boubchir Larbi; Daoudi Abdelaziz	38	Semi-Supervised Medical Image Segmentation with Foundation Models: Recent Advances, Benchmarks, Challenges, and Perspectives Mammeri Samir*; Brahimi Belgacem	15	Facial Emotion Recognition Using Deep Learning Approach Kadi Douaa*; Heltali Nada Erayhane; Agoune Rania; Gadri Said
	12:45 - 13:00	11	Behavior-Aware Learning Style Classification Using Multilayer Neural Architectures Hamza Lamia*	9	A Graph-Based Hybrid Clustering Approach for Detecting Complex Structures in Synthetic Data Nassira Lograda*	27	Self-Supervised Transfer Learning for Arabizi Sentiment Analysis Ouchene Lamia*; Bessou Sadik
	13:00 - 13:15	21	Deep Learning Architectures for Predictive Drug Screening: Advances in Neural Networks and AI-Driven Drug Discovery REZAZI Sarah*	39	A Systematic Review of Quantum Machine Learning: Taxonomy, Tools, and Future Horizon Bouras Wafa*	30	Multimodal Fusion and Artificial Intelligence for Personality Trait Assessment in Recruitment Processes: Application to Sensitive Environments Rofia Belakroum*

Tuesday 25 November 2025	13:15 - 14:00	Lunch					
		Session 4 : ML&DL Applications: Medecine, Bioinformatics Chairs : Pr. Lamri Sayad (Univ. Mohamed Boudiaf M'sila) & Dr. Abdelhafid Benyounes (Univ. Mohamed Boudiaf M'sila) Room : Conference Room, 1st floor (Incubator Center)		Session 5 :ML&DL Applications: Speech Recognition, NLP Chairs : Pr. Hichem Debbi (Univ. Mohamed Boudiaf M'sila) & Dr. Mounir Bouras (Univ. Mohamed Boudiaf M'sila) Room : Expo Room, 1st floor (Incubator Center)		Session 6 :ML&DL Applications: Detection Systems Chairs : Pr. Allaoua Hemmak (Univ. Mohamed Boudiaf M'sila) & Dr. Salah Khennouf (Univ. Mohamed Boudiaf M'sila) Room : CATI Room, 1st floor (Incubator Center)	
	14:00 - 14:15	22	Explainable AI for Heart Failure Diagnosis Using ECG and PPG : A Review of Methods, Challenges and Clinical Assurance Mohammedi Amira*; Tahar Mehenni	12	Automatic Speech Recognition for the Amazigh Language Using Whisper Zaidi Ali*; Azi Mourad; Matoub Saida; Idir Lamine	37	Recent Advances in Fire Detection and Localization using AI and IoT: A Survey (2021–2025) Ammiche Sarah*; Gadri Said
	14:15 - 14:30	24	A Survey on Generative Models for RNA Design Benaiche Abla*; Gadri Said	16	Speech Emotion Recognition Using Deep Learning Models Agoune Rania*; Nada Eryahane Heltali; Douaa Kadi; Gadri Said	36	WakeUp AI – Fatigue Detection System Fayek Maarfi*; Youcef Brik; Bilal Attallah
	14:30 - 15:00	26	Deep Learning and Explainable AI for Plant Disease Detection: A Comprehensive Survey Lantri Nour El Houda*; Chefrour Aida; Namoun Abdallah	28	Creation of a Dataset and Development of a Speech Recognition System for the Amazigh Language (Kabyle) Azi Mourad*	8	Cross-Dataset Evaluation of Feature-Based and Deep Learning Models for Crowd Anomaly Detection Nesrine Rachedi*; Heraguemi Kamel Eddine; Senoussaoui Ikram; Azib Toufik
	15:00 - 15:15	33	A Hybrid ResNet50-PCA-SVM Model for Accurate Palmprint Recognition Bedjekina Kheira Fairouz*; Attallah Bilal; Brik Youcef; Maarfi Fayek	34	Dynamic spammer detection using deep learning with temporal graph embeddings Hemza Loucif*, Samir Akhrouf		
	15:15 - 16:00	Closing ceremony + Best Paper Award					