

National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and AI Research Lab - University of South Dakota (USA)



----- Conference schedule ------

Date: 11 December, 2025			
Ti	me	Event	
8.30 AM	9.00 AM	Registration and Breakfast	
9.00 AM	9.30 AM	Opening speech:	
		Dr. Belaid Bougadir: President of Cadi Ayyad university	
		Dr. Hassan Ayyad: Director of ENSA Marrakech	
		Dr. KC Santosh: Honorary chair	
		Dr. Anas Abou El Kalam: General chair	
9.30 AM	10.30 AM	Keynote speech: Dr. Djamila Aaouad	
10.45 AM	12.30 PM	Session I: In person presentations	
12.30PM	1.30 PM	Lunch	
1.30 PM	2:30 PM	Keynote speech: Dr. Abdeslam Jakjoud	
3.45 PM	7.00 PM	Session II: Track I and Track II in Parallel (Online)	
7.00 PM	7.15 PM	Tea break and networking	
7.30 PM	8.30 PM	Cultural event	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and AI Research Lab - University of South Dakota (USA)



Date: 12 December, 2025				
Time		Event		
8.30 AM	9.30 AM	Registration and Breakfast		
9.30 AM	10.30 AM	Keynote speech: Dr. Ravindra Hegadi		
10.45 AM	01.45 PM	Session III: Track I and Track II in Parallel (Online)		
2.00 PM	3.00 PM	Lunch		
3.00 PM	4:00 PM	Keynote speech: Dr. Mo Medwani		
4.15 PM	7.15 PM	Session IV: Track I		
7.15 PM	7.30 PM	Tea break and networking		
7.30 PM	8.30 PM	Cultural event		







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and Al Research Lab - University of South Dakota (USA)



Date: 13 December, 2025			
Time		Event	
8.30 AM	9.30 AM	Registration	
9.30 AM	10.30 AM	Keynote speech: Dr. KC Santosh	
10.45 AM	01.45 PM	Session IV: Track II	

---- Session Details ------

Session I : Applied AI and Machine Learning Across Healthcare, Security, and Environmental Systems

Sessi	Session: I (In person)		
SoP	P Id	Title	
1	118	Mono Temporal Buffer-Based Spatial Generalization in CNNs for Damage	
		Detection Post Flood using High-Resolution Aerial Imagery	
2	142	An integrated approach for recognition of plant leaf disease using CNN and	
		SVM	
3	169	Enhancing Data Security with the Innovative MLADE Framework for Multi-	
		Level Encryption	
4	173	Uncertainty-Quantification and ML Explainability for Cervical Cancer	
		Classification	
5	182	Al-driven Framework for Enhancing Security and Quality of Service in	
		Avionics Systems	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

t rtip2v

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and Al Research Lab - University of South Dakota (USA)



Session II: Intelligent Vision and Human Interaction

Sess	Session : II (Online) Track I: Advanced Computer Vision and Object Detection		
SoP	P Id	Title	
1	6	Enhancing Deaf Communication: Nepali Sign Language Recognition using YOLOv8 and NepaNet	
2	10	Lightweight Transformer with Graph Attention for UAV Image Super- Resolution	
3	36	Vision-Based Obstacle Detection and Avoidance for Agricultural Drones Using YOLOv8	
4	65	Automated Car Damage Identification via YOLOv8 and Computer Vision Techniques	
5	49	Text Extraction from Natural Scene Image using YOLO8	
6	88	Real-Time Underwater Crack Detection with YOLOv11 on Raspberry Pi for Marine Infrastructure Inspection	
7	102	Bangladeshi License Plate Detection and Recognition Using YOLO Variants and Enhanced OCR with Model Interpretability	
8	107	Benchmarking YOLOv11 and YOLOv12 for Peripheral Blood Cell Detection: Analysis of the impact of Model Scale and Dataset Quality	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

t vtip2v EST 2016

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and AI Research Lab - University of South Dakota (USA)



9	22	Efficient Image Encoding Approaches for Vision based IoT Systems
10	55	FreshDetect: Real-Time Fruit Freshness Evaluation Using Deep Learning
11	92	3D Reconstruction: Depth Estimation of the UAV Based Fruit Trees with 2D
		images
12	117	Survey on Smart traffic flow architecture for autonomous vehicle
13	86	SwinRH-DeBlur: A Unified CNN-Swin Transformer Residual Hybrid Deblurrer
		for Realistic Motion Blur Removal

Session : II (Online) Track II: Vision-Based AI for Healthcare and Diagnostics		Online) Track II: Vision-Based AI for Healthcare and Diagnostics	
SoP	P Id	Title	
1	19	Quantitative Texture Evaluation of Placental Ultrasound Images for Fetal	
		Morbidity Analysis	
2	40	Advancing Endoscopic Diagnosis: A Comparative Study of CNNs and Tuned	
		Multimodal LLMs with Interpretable Insights	
3	43	Deep Learning for Lung Cancer Classification: Evaluating CNNs with	
		Saliency Maps and Grad-CAM on CT Scans	
4	44	Custom and Hybrid CNN Architectures for Gastric Cancer Histopathology	
		Image Classification: A Comparative Study on GCHTID	
5	41	Hybrid Deep Learning Models for Multiclass Classification of Sperm	
		Morphology Using CNN and Vision Transformer Architectures	
6	99	Breast Cancer Classification in Ultrasound via ViT-CNN-ATS	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)





In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and Al Research Lab - University of South Dakota (USA)

7	140	Deep Learning-Based Brain Tumor Classification from Multi-Slice MRI: A
		Comparison of CNN Architectures
8	141	Deep Learning Approach for B-Cell Non-Hodgkin Lymphoma Subtype
		Classification Using Histopathological Image
9	42	FusionAI: A Dual-Modality Deep Learning Framework Combining CT Imaging
		and Biochemical Markers for Early Kidney Cancer Detection
10	177	Enhanced U-Net Architecture with VGG16 Backbone and Attention
		Mechanisms for Automated Nasal Sinus Disease Segmentation
11	120	Deep Learning-Based Diagnosis of Keratoconus: A Comparative Study of
		MobileNetV2, VGG16, and InceptionV3 Models
12	170	Brain Tumor Classification Using MobileNet-ViT with Visual Explainability
		through Grad-CAM
13	85	RetinaFormer: A Hybrid Vision Transformer-CNN Architecture for Diabetic
		Retinopathy Grading
14	143	Integrating Feature Reduction and Machine Learning for Breast Cancer
		Diagnosis: An LDA-Based Approach







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

rtip2r

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and Al Research Lab - University of South Dakota (USA)



Session III: AI for Health, Behavior, and Cognitive Analysis

Sessi	Session : III (Online) Track I: Deep Learning in Biomedical and Cognitive Sciences		
SoP	P Id	Title	
1	47	Explainable Deep Learning for Multi-Class ECG Classification Using Hybrid Vision Transformer Models	
2	122	Predicting the Outcome of rTMS Depression Therapy using EEG signals and CNN	
3	123	Predicting the outcome of rTMS depression therapy using CQT and CNN	
4	111	Deep Convolutional Architectures for EEG Classification: A Comparative Study with Temporal Augmentation and Confidence-Based Voting	
5	110	Enhancing Code-Modulated Visual Evoked Potential Classification for Brain- Computer Interfaces with Laplacian Spatial Filters	
6	112	M-NetTr: Transformer Architecture for Retinal Vascular Segmentation using Fundus Images	
7	81	A Novel Approach for Classification of Different Types of Dementia Using Depthwise Separable Convolution Neural Network	
8	139	Recognizing Cardiovascular Risk Patterns using Ensemble Learning Algorithms	
9	101	A Unified Approach to Skin Cancer Classification and Stage Detection	
10	168	Machine Learning–Based Dengue Diagnosis Using Clinical and Routine Hematological Data Without Antigen Testing: Evidence from Bangladesh	
11	94	Diagnosis of Domestic Animal Skin Diseases: An Advanced Deep Architecture Approach	
12	96	Benchmarking Deep Neural Network Architectures for Multi-Class Cardiac Condition Classification	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

t rtip2v

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and AI Research Lab - University of South Dakota (USA)



Sess	Session : III (Online) Track II: Data Analysis, Prediction, and Behavior Modeling		
SoP	P Id	Title	
1	61	A Data Analysis on Diabetic Patients Using Data Mining Tools and Prediction Algorithms	
2	78	Exploratory Analysis of Factors Influencing Cognitive Decline and the Classification of Diverse Health Domains Across Regional and Demographic Populations	
3	79	Healthcare Facilities in India Across States/UTs Using Exploratory Data Analysis Concepts	
4	17	Leveraging Deep Learning Model for Advanced Anomaly Detection in Apple Harvests in India	
5	71	Sugarcane Disease Detection Using Machine Learning	
6	146	Visual interpretable methods for skeleton Models	
7	151	Delving into Deep Learning: Unrevealing Academic Horizons through metric study	
8	95	Transparency in Fabric Defect Detection by Leveraging Explainable AI in Deep Learning Models	
9	48	Low Resource Multimodal Translation of Nepali Spoken Words into Emotion-Conditioned Sign Language Avatars.	
10	82	GenZ Phrase Translation using Multi-model Machine Learning Approach	
11	75	A Hybrid Approach for Telugu Script Identification in Multilingual Digital Document Images	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and AI Research Lab - University of South Dakota (USA)



Session IV: AI Systems, Security, and Emerging Technologies

Sessi	Session : IV (Online) Track I: Secure and Ethical AI Applications		
SoP	P Id	Title	
1	171	AI-Driven Predictive Policing and Facial Recognition in Rajasthan: A Critical	
		Analysis of the Abhay Command Center	
2	172	In-Depth Web Vulnerability Assessment via Open-Source Intelligence	
		Techniques	
3	74	Comparative Analysis of Deep Learning and Machine Learning Approaches	
		for the Detection of Hardware Trojans	
4	183	DeepSecure-A CNN and LSTM based approach for DeepFake detection	
5	76	Advancing Person Authentication: Integrating Face and Finger Vein	
		Biometrics Using DCNN-Based Feature Fusion	
6	174	Singularity in Neural Trainings	
7	103	Al-Assisted Semi-Supervised Framework for Efficient Annotation of	
		Suspicious Activities in Computer Lab CCTV Footage	
8	178	A Smart Multi Plant Disease Detection Utilizing AI through Website and	
		WhatsApp Chatbot	
9	93	Deep Learning-Based Image Captioning with ResNet-50 and GRU for	
		Assistive Applications	
10	38	Snap to Cook — Al Recipe Generator from Food Image Using Residual	
		Network: ResNet101	
11	25	Robust Feature Learning for Adversarial Defense: A Margin-Based	
		Supervised Contrastive Framework	
12	176	Explainable AI Driven Prediction for Betel Leaf Disease Classification using	
		Grad-CAM	







National School of Applied Sciences Marrakech, Morocco

8th International Conference on Recent Trends in Image Processing & Pattern Recognition (RTIP2R)

In collaboration with Research Laboratory in Sustainable and Intelligent Technologies (LaRTID) - Marrakech (Morocco) and Al Research Lab - University of South Dakota (USA)



Sessi	Session: IV (Online) Track II: Intelligent Systems and Automation Frameworks		
SoP	P Id	Title	
1	77	Efficient Segmentation and Analysis Automation of LiDAR Data	
2	116	Design and Evaluation of a Multi-Agent RAG System for Automated	
		Knowledge Extraction and Task Generation	
3	129	Multimodal Deep Learning Framework for Automated Detection and	
		Classification of Lung Diseases Using 3D CT Scans and Clinical Data	
4	84	Deep Learning Based Multi-Class Human Fall Detection System using K-Fall	
		dataset for Wearable Devices	
5	113	Attention-Based Hybrid ViT-ResNet Model for Bangladeshi Mango	
		Classification	
6	184	Brain Cancer Detection using Deep Learning Models Empowered by	
		ensemble approach	
7	124	Multimodal Suicide Risk Detection on Social Media using Deep Learning and	
		Transformer Architectures	
8	175	Air-Written Digit Recognition with CNN(ResNet-18) and BiLSTM: A Spatio-	
		Temporal Approach on ISI-Air Dataset	
9	80	A Code-mixed Hausa-English Parallel QA Corpus for Bilingual Question	
		Answering: Design, Implementation, and Evaluation	
10	98	Efficient Lung CT Volume Reduction through Adaptive Seed Point Detection	
		for Slice Discarding	



