

**2026 IEEE 13th International Symposium on Image, Signal,  
Video and Communications**

**TECHNICAL PROGRAM**

UTC+1 Time	Wednesday May 20, 2026	UTC+1 Time	Thursday May 21, 2026	UTC+1 Time	Friday May 22, 2026
08:00 09:30	Onsite Registration				
09:30	Opening Ceremony	09:00	Plenary Session 3	09:00	Plenary Session 5
10:00	Homage Ceremony Pr. Driss ABOUTAJDINE	09:45	Session 5: DCN	09:45	Plenary Session 6
11:00	Tea & Coffee Break	11:30	Tea & Coffee Break	10:30	Tea & Coffee Break
	Poster Session		Poster Session		
11:30	Plenary Session 1	11:45	Session 6: DSA	10:50	Session 9: CVIP
12:15	Session 1: CVIP			10:50	Session 10: DCN
				10:50	Workshop – part 2
13:30	Lunch Break	13:30	Lunch Break	12:30	Closing Ceremony Best Papers Best Posters
15:00	Plenary Session 2	15:00	Plenary Session 4	13:00	Lunch Break
15:45	Session 2: SAP	15:45	Session 7: CVIP	Free time and guided city tour	
17:00	Tea & Coffee Break	17:00	Tea & Coffee Break		
17:20	Session 3: DSA	17:20	Session 8: SAP		
17:20	Sessions 4: DCN	17:20	Workshop – part 1		

20 – 22 May 2026, Faculty of Sciences and Techniques, Beni Mellal, Morocco.

All oral sessions will take place in the “Amphi des Conférences”.

For posters, they will be exhibited in the Hall of the “Amphi des Conférences”.

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**DETAILED PROGRAM**

<b>UTC+1 Time</b>	<b>Wednesday May 20, 2026</b>
<b>08:00 09:30</b>	<b>Onsite Registration</b>
<b>09:30 10:00</b>	<p style="text-align: center;"><b>Opening Ceremony</b></p> <ul style="list-style-type: none"> <li>• M. Azzedine EL MIDAOU, Minister of Higher Education, Scientific Research and Innovation, Morocco</li> <li>• M. Khalid MEHDI, Interim President of Sultan Moulay Slimane University, Beni Mellal, Morocco</li> <li>• M. Ahmed BARAKAT, Dean of Faculty of Sciences and Technics FST, Beni Mellal, Morocco</li> <li>• Mme. Najlae IDRISSE, General Chair of ISIVC 2026, FST, Beni Mellal, Morocco</li> <li>• M. Samir SAOUDI, Steering Chair of ISIVC, IMT Atlantique, France</li> </ul>
<b>10:00 11:00</b>	<p style="text-align: center;"><b>Homage Ceremony Pr. Driss ABOUTAJDINE</b></p>
<b>11:00 11:30</b>	<p style="text-align: center;"><b>Tea &amp; Coffee Break</b></p> <p style="text-align: center;"><b>Poster Session</b> Chair: Prof. I. KHOULQI</p>
<b>11:30 12:15</b>	<p style="text-align: center;"><b>Plenary Session 1: “3D Digitization and Completeness: Application to Cultural Heritage”</b> By Prof. M. EL MOUADDIB (Picardie University, FR) Chair: Prof. H. CHAKIB</p>
<b>12:15 13:30</b>	<p style="text-align: center;"><b>Session 1: Computer Video and Image Processing (CVIP)</b> Chair: Prof. Y. SAADI</p> <ul style="list-style-type: none"> <li>• 29 - <i>INGEN-eyx: An Integrated GenAI and ML-Based Early Detection of Glaucoma.</i> Syma Afsha</li> <li>• 39 - <i>TNY-INGEN-eyx: An Optimized TinyML-Based Early Detection of Glaucoma with Severity Level.</i> Fortunatus Aabangbio</li> <li>• 41 - <i>Generative AI-Based Synthetic Data Augmentation for Unimodal Driver Inattention Detection.</i> Ghita Layoune</li> <li>• 51 - <i>Learning Where to Look: Dataset-Guided ROI Supervision for Interpretable Fundus Disease Classification.</i> Youssef Siyah</li> </ul>
<b>13:30 15:00</b>	<p style="text-align: center;"><b>Lunch Break</b></p>
<b>15:00 15:45</b>	<p style="text-align: center;"><b>Plenary Session 2: “Toward 6G Networks: Vision, Enabling Technologies, Key Challenges, and Future Research Directions”</b> By Prof. Rachid SAADANE (EHTP, MAR) Chair: Prof. A. HAIR</p>
<b>15:45 17:00</b>	<p style="text-align: center;"><b>Session 2: Signal and Audio Processing (SAP)</b> Chair: Prof. M. ERRITALI</p> <ul style="list-style-type: none"> <li>• 25 - <i>Subject-Independent EEG Feature Analysis Using Machine Learning to Classify Alzheimer’s Disease and Frontotemporal Dementia.</i> Amina Lakkiri</li> <li>• 63 - <i>Speech-to-Text-to-Graph: GCN-Based Alzheimer’s Detection from Narrative Transcripts.</i> Anass El Hallani</li> <li>• 86 - <i>Listening Through Temporal Windows: Multi-Scale Hierarchical Attention for Early Alzheimer Detection.</i> Othmane Elazri</li> <li>• 114 - <i>EEG-Aware Data Augmentation for Imagined Speech Classification Using Topographic Feature Mapping and 3D-CNN.</i> Sanae Belfrouh</li> </ul>
<b>17:00 17:20</b>	<p style="text-align: center;"><b>Tea &amp; Coffee Break</b></p>
<b>17:20 19:00</b>	<p style="text-align: center;"><b>Session 3: Data Science and Applications (DSA)</b> Chair: Prof. I. KHOULQI</p> <ul style="list-style-type: none"> <li>• 56 - <i>The Unseen Power of Statistical Aggregation: Enhancing Predictive Modeling with the OULAD.</i> Khadija Nid Said</li> <li>• 102 - <i>Intelligent Platform for Medical Diagnosis and Tumor Detection.</i> Ilham Nouini</li> <li>• 106 - <i>A Multi-Objective Benchmark of FAISS Indexes for Lightweight On-Device Recommendation Retrieval.</i> Charaf Hamidi</li> <li>• 113 - <i>A Comparative Study of Large Language Models for Model-Driven Reverse Engineering.</i> Hamza Abdelmalek</li> </ul> <p style="text-align: center;"><b>Session 4: Digital Communications and Networking (DCN)</b> Chair: Prof. I. CHAKOUR</p> <ul style="list-style-type: none"> <li>• 40 - <i>A Conceptual AI Framework for Intelligent Management of Telecommunication Networks.</i> Nina Miftah</li> <li>• 42 - <i>Maching Learning for Task Completion Time Minimization in Edge Cloud System.</i> Ayoub Atti</li> <li>• 55 - <i>An Intrusion Detection System for Internet of Things Security Based on Machine Learning.</i> Abdessamad Chaou</li> <li>• 60 - <i>Adaptive Multi-Criteria Selection for V2X Interfaces in Highly Dynamic Environments.</i> Mohamed Amine Bouzaïdi Tiali</li> <li>• 84 - <i>Design and Evaluation of an Arabic Language-Specific Conversational Agent with Emotion-Aware Response Generation.</i> Salah Eddine El Jarroudi</li> </ul>

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<b>UTC+ 1 Time</b>	<b>Thursday May 21, 2026</b>
<b>09:00 09:45</b>	<b>Plenary Session 3: “Applications of AI in neurology: from data analysis to clinical collaboration”</b> <i>By Prof. Sofia BENJEBARA, (Sup'Com, TN)</i> Chair: Prof. A. AMINE
<b>09:45 11:25</b>	<b>Session 5: Digital Communications and Networking (DCN)</b> <i>Chair: Prof. M. LAZAAR</i> <ul style="list-style-type: none"> <li>• 90 - Adaptive Terminal Sliding Mode Control for Secure Cyber-Physical Systems: The case of a robot manipulator under actuator/sensor cyber-attacks. Brahim Moudoud</li> <li>• 99 - On the Downlink Spectral Efficiency Analysis of Multi-Active RIS-Aided Cell-Free Massive MIMO. Prince Anokye</li> <li>• 115 - Performance Analysis of ORAN-based Non-Terrestrial Networks: Functional Splitting, Power Consumption, and Latency. Md. Thouhidur Rahman</li> <li>• 120 - Behavior Analytics for Proactive Cybersecurity: Early Detection, Threat Hunting, and Incident Forensics Using Machine Learning. Nada Hamzaoui</li> <li>• 124 - Machine Learning Optimization and Dimension Prediction of a 26 GHz Microstrip Patch Antenna. Nouhayla EL Anzoul</li> </ul>
<b>11:25 11:45</b>	<b>Tea &amp; Coffee Break</b>
<b>11:45 13:30</b>	<b>Session 6: Data Science and Applications (DSA)</b> <i>Chair: Prof. A. DARIF</i> <ul style="list-style-type: none"> <li>• 126 - Lightweight Coffee Leaf Disease Classification and Severity Estimation for Smart Agriculture. Youssef Chigane</li> <li>• 135 - Assessing the Impact of Lemmatization-Based AraBART for Arabic Abstractive Text Summarization. Soumia Afartass</li> <li>• 146 - Novel Intuitionistic Fuzzy Reflexes for Decision-Making: Evacuation as a Case Study. Zakaria Bouhanch</li> <li>• 158 - Generative Adversarial Networks for Data Augmentation in Deep Learning-Based Image Classification. Abdeljalil El Ibrahimi</li> <li>• 139 - IMU-Only UAV Motor Fault Prediction Before Failure: A Multi-Model, Multi-Horizon Machine Learning Benchmark on the RflyMAD Dataset. Abdelilah Zadid</li> </ul>
<b>13:30 15:00</b>	<b>Lunch Break</b>
<b>15:00 15:45</b>	<b>Plenary Session 4: “The Intelligence Behind Faces: Bridging Frequency Analysis and Deep Learning”</b> <i>By Prof. A AMINE, (Ibn Tofail University, MA)</i> Chair: Prof. D. AIT OMAR
<b>15:45 17:00</b>	<b>Session 7: Computer Vision and Image Processing (CVIP)</b> <i>Chair: Prof. K. MINAOUI</i> <ul style="list-style-type: none"> <li>• 68 - Parameter-Efficient Adaptation of DINO Vision Transformers for Cervical Cytology via Attention LoRA. Zakariae El Aidi</li> <li>• 88 - Bidirectional Convolutional Neural Networks for Alzheimer’s Disease Classification from Segmented Brain MRI. Mohammed Lahbel</li> <li>• 136 - Improving Breast Cancer Diagnosis through Adapted Vision Transformers (ViTs). Mohammed Mechdoud</li> <li>• 76 - Lightweight YOLO-Based Road Surface Condition Detection: A Comparative Study of YOLOv8s, YOLO11s and YOLO26s. Roa El Dhimni</li> </ul>
<b>17:00 17:20</b>	<b>Tea &amp; Coffee Break</b>
<b>17:20 19:00</b>	<b>Session 8: Signal and Audio Processing (SAP)</b> <i>Chair : Prof. M. CHAKRAOUI</i> <ul style="list-style-type: none"> <li>• 116 - Statistical Feature Selection over Self-Supervised Speech Representations for Autism Detection. Mouad El Omari</li> <li>• 117 - Interpreting Respiratory Sounds for Robust Disease Detection Using Machine Learning. Younes EL BELGHITI</li> <li>• 123 - FMCW Radar Performance Enhancement for Long Range Pedestrians Detection. Nouhaila Guirrou</li> <li>• 127 - Multimodal Speech Analysis for Early Dementia Detection Using Cross-Modal Attention Fusion. Yassine Zaoui</li> <li>• 87 - Enhanced Temporal-Spectral Fusion Network for Parkinson’s Disease Detection from Voice Recordings. Oumaima Majdoubi</li> </ul>
<b>17:20 19:00</b>	<b>Workshop (1): “Building LLM applications using langchain and langgraph”</b> <i>By Prof. Y. SAADI (USMS, MAR)</i> Chair: Prof. H. ZOUGHAGH
<b>20:30</b>	<b>Gala Dinner</b>

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<b>UTC+ 1 Time</b>	<b>Friday May 22, 2026</b>
<b>09:00 09:45</b>	<p style="text-align: center;"><b>Plenary Session 5: “Design, launch, and operation of two university-developed nanosatellites for research in signal and image processing”</b> By Prof. ADDAIM (Mohamed V University, MA) Chair: Prof. S. SAOUDI</p>
<b>09:45 10:30</b>	<p style="text-align: center;"><b>Plenary Session 6: “Teaching Machines to Understand People: Faces, Bodies, Interactions, and Mental Health”</b> By Prof. Mohamed DAOUDI (Lille University, FR) Chair: Prof. A. RIVENQ</p>
<b>10:30 10:50</b>	<b>Tea &amp; Coffee Break</b>
<b>10:50 12:30</b>	<p style="text-align: center;"><b>Session 9: Computer Vision and Image Processing (CVIP)</b> Chair: Prof. Y. SAADI</p> <ul style="list-style-type: none"> <li>• 141 - High-Precision Curvature Estimation in Scheimpflug Imaging via Enhanced Wavelet Decomposition. Fath Mounassif</li> <li>• 143 - A Two-Stage Pipeline Approach for Efficient Traffic Sign Recognition on Embedded System. Imane Taouqi</li> <li>• 145 - Real-Time Waste Detection in Urban Environments: A Comparative Study of YOLO (v8–v11) and RT-DETR. Imane Tibari</li> <li>• 140 - A Descriptive Mapping Review of Computer Vision Preprocessing and Pose Estimation Techniques in Sports Video Analysis. Hind El Baz</li> </ul> <p style="text-align: center;"><b>Session 10: Digital Communications and Networking (DCN)</b> Chair: Prof. R. SAADANE</p> <ul style="list-style-type: none"> <li>• 125 - Terahertz Uplink Communications Analysis in Active RIS-equipped UAV Relay Networks. Yakubu Bunyaminu</li> <li>• 142 - Design and Simulation of a Frequency-Reconfigurable Microstrip Patch Antenna for 5G and 6G Applications. Charaf Orhanou</li> <li>• 147 - A Review of Knowledge Graph–Driven Adaptive Learning and Learning Path Recommendation. Mohamed Bouizerguane</li> <li>• 154 - Review on the Design and Development of an Intelligent Pedagogical Assistant for Predictive Analysis of Academic Dropout. Mohamed Lachgar</li> <li>• 157 - Energy–Delay Tradeoff Modeling and Optimization in Fog Computing via Hybrid Queueing and Machine Learning. Oumaima Ghandour</li> </ul>
<b>10:50 12:30</b>	<p style="text-align: center;"><b>Workshop (2): “Building LLM applications using langchain and langgraph”</b> By Prof. Y. SAADI (USMS, MAR) Chair: Prof. H. ZOUGHAGH</p>
<b>12:30 13:00</b>	<b>Closing Ceremony Best Papers Best Posters</b>
<b>13:00 15:00</b>	<b>Lunch Break</b>
<b>Free Time</b>	