

STSE2026 Conference Program Time Slots

Timing GMT+1	Thursday, April 23, 2026		
09:00-09:30	Registration		
09:30-10:00	Opening Ceremony		
10:00-10:30	Coffee Break		
10:30-12:00	Keynote Speaker 1		
12:00-13:30	STSE-P1	STSE-V1	STSE-V2
14:00	LUNCH		
15:30-16:45	Keynote Speaker 2		
16:45-18:30	STSE-P2	STSE-V3	STSE-V4

Timing GMT+1	Friday, April 24, 2026		
09:30-10:30	Keynote Speaker 3		
10:30-11:30	STSE-P3	STSE-V5	STSE-V6
11:30-12:00	Coffee Break		
12:00-13:00	STSE-P4		
14:00	LUNCH		
15:00	Excursion To Merzouga		

Detailed Program

Thursday, April 23, 2026

Registration	09:00-09:30
Room: Registration Room	
Opening	09:30-10:00
Welcome of participants to the conference and Opening Ceremony	
<ul style="list-style-type: none">▪ Dean of Faculty of Sciences and Techniques, Errachidia, Morocco▪ Dean of Faculty Polydisciplinary, Errachidia, Morocco▪ STSE2026 conference organizing committee	
Room: AMPHI	
Coffee Break	10:00-10:30
Room: Meeting Foyer	
Keynote Speaker 1	10:30-12:00
The Generative Frontier: Architecting Resilient, Agentic, and Human-Centric AI Ecosystems	
Dr. Imad Zeroual, FST Errachidia, Morocco	
Session Chairs:	
Dr. A. Guezzaz, EST Essaouira, Morocco	
Dr. Y. Farhaoui, FST Errachidia, Morocco	
Room: AMPHI	

STSE-P1: Innovations in Healthcare and Water Quality

Session Chairs :

Dr. A. El Allaoui, FST Errachidia, Morocco

Dr. J. Mabrouki, FS Rabat, Morocco

Room: AMPHI**21: Integration of Internet of Things in Healthcare Systems: Architecture, Attacks, and security Approaches***E.h. Ouajbir, M.Azrou, A.Fatima, and A.Guezzaz***29: Seasonal Assessment of Groundwater Suitability for Irrigation Using an Integrated IWQI and Machine Learning Approach***A. El Mansour, S. Ait Boughrou, M. Oumoulyte, A.Abdaoui, and A. Ait Boughrou***37: AI-Driven Smart Healthcare: A Comprehensive Survey of Deep Learning for Medical Image Cryptography***M.Yakine, F.Amounas, M.Azrou, S.Bendaoud, M.Badiy, and H.Timouhin***127: Real-Time Sentiment Analysis over Social Media Streams for Strategic Business Intelligence: A Comparative Study of Machine Learning and Deep Learning Approaches***A. Hamza, A.O. Alaoui, Y. Farhaoui, and A.E. Allaoui***30: Bioassessment of water quality using benthic macroinvertebrates in wetlands downstream of Kaddoussa dam (South-Eastern Morocco)***S.Ait Boughrou, A.El Mansour, A.El Mimouni, I.Lamine, and A.El-Haidani***STSE-V1: Data Analysis and AI for Cybersecurity Security**

Session Chairs :

Dr. A. Sultan, Sattam Bin Abdulaziz University, Saudi Arabia

Dr. A. El Mouatasim, FP Ouarzazate, Morocco

Room: Online**84: Explainable Detection and Localization of Stealthy False Data Injection Attacks in Smart Grids***A.Naqqad, R.Habachi, and A.Boulal*

116:A systematic review of GPSR enhancements for VANETs A.
Amina Bengag and Asmae Bengag

34:Optimization of Sensitive Data Management in FinTech Services Using Homomorphic Encryption Techniques

M.Jarmoune and A.El-Yahyaoui

25:A Bibliometric Analysis of Synthetic Data Generation using LLM and GenAI in Cybersecurity

H.Moustaoui, A.El-Yahyaoui, and H.Bensaid

70:A Multi-Level Explainable AI Framework Using LIME and SHAP-IQ for Model Decision Interpretation

H.Assmi , A.Guezaz, S.Jabbour, S.Benkirane, and M.Azrou

28:A Comparative Security Analysis of Android and iOS Operating Systems

A.Aboubit, Z.El-Bakraouy and A. El-Yahyaoui

129:Toward Compact DDoS Detection in SDN-IoT Environments through Preprocessing and Feature Selection

Kaoutar TEBBAA, Yassine MALEH, and Mustapha BELAISSAOUI

STSE-V2: AI for Smart Healthcare

Session Chairs :

Dr. M. Badiy, ENIAD Berkaneé&&, Morocco

Dr. A. Guezaz, EST Essaouira, Morocco

Room: Online

44:Causality-Driven Explainable AI for Neurological Disorders: A Comprehensive Review of Current Methods and Future Directions

I.Marrouss and A.Darouichi

109:Advancements in brain tumor detection and classification: A review of Vision Transformers-based methods

S.Bouhafra, and H.El Bahi

115:Explainable Artificial Intelligence for Early Alzheimer's Disease Prediction Using Lifestyle and Behavioral Features

A.Bouarafa, B.Bouarafa, and J.El Bouhdidi

41:Machine Learning-Driven Prediction of RET Inhibitors in Non-Small Cell Lung Cancer: A SHAP-Guided Feature Selection and Model Explainability Approach

H.Ennasty, and A.Darouichi

35:Smart Healthcare Systems and Inclusive Human Resource Management: A PRISMA-Based Systematic Review on Feminine Leadership, Gender Diversity and Employee Well-Being

O.El-Ogri, A.Taghzouti, A.El Idrissi, and S.Remmal

97: Impact of Lightweight GAN Architectures for MRI Super-Resolution in Low-Resource Clinical Settings

H.Mediani, S. Mekouar, and M. Majid Himmi

Lunch

14:00

Keynote Speaker 2

15:30-16:45

Bridging Education 4.0 with Industry 4.0: A Machine Learning Analysis of Job Market Readiness in Morocco

Dr. Said Azelmad, FST Errachidia, Morocco

Session Chairs:

Dr. A. Elyoussefi, ENSAM Meknes, Morocco

Dr. Halima Tahiri, Kuleuven university, Belgium

Room: AMPHI (online)

Technical Sessions

16:45-18:30

STSE-P2:AI for Data Analytics

Session Chairs :

Dr. Y. Qaraai, FST Errachidia, Morocco

Dr. M.K. Boutahir, ENIAD Berkaneb, Morocco

Room: EMPHI

86:Combining LoRA and IA³ for Parameter-Efficient Multimodal Adaptation of BLIP-2

A.Mouaffak and I.Zeroual

128:Urban expansion detection via time-series satellite imagery and Random Forest modeling- Evidences from Tamansourt
M. Abdedaïme, B. El Kanfoud, F.Z. Moussaid, A.Qafas, A. Guezzaz, and M. Azrour

51:An Integrated Robotics and Browser-Based AI Platform for Artificial Intelligence Education
Y.Amkrane, F.Amounas, M.Azrour, and S.Bendaoud

112:Normal and Abnormal Colorectal Tile Classification Using AI-Driven Approaches
B.Bouarafa, A.Bouarafa, B.Aghoutane, A. El Allaoui, and Y.Farhaoui

73:Deep Learning for Sentiment Analysis of Comments Shared on Social Web Platforms
A.Fathi, A.Guezzaz, F.Amounas, and M.Azrour

74:Fine-Tuning RoBERTa for Hate Speech Detection: A Comparison with HateBERT on HateXplain
M.Hassane, M.Azrour, and A.Guezzaz

STSE-V3: AI for Sustainable and Renewable Energy

Session Chairs :

Dr. A. Benami, FST Errachidia, Morocco

Dr. S. Ziani, UMV Rabat, Morocco

Room: online

16:Explainable AI-Based Recommender Systems for Quality, Safety and Environmental Optimization in Sustainable Industrial Processes
K.Errakha, S.Dfouf, A.Krari, and A.Marzouk

43:Design of a Secure Layered OT-IT Architecture for Smart Grids Based on the Purdue Model and IEC 62443
H.Lakhal, M. Zegrari, and A.Bahnasse

125:Parameter Extraction of Photovoltaic Models Using Pied Kingfisher Optimizer with Iterative Refinement
A.Bouaouda, and Yassine Sayouti

67:Degradation-Aware Machine Learning Framework for Direct

Seawater Electrolysis and Hydrogen Cost Assessment: A Case Study of Dakhla, Morocco

R. Naceiri Mrabti, H. El Hassani, and N.Boutammachte

24:AI-Driven Aircraft Trajectory Optimization for Green Aviation: A Bibliometric Analysis

K. El Ouanbi

14: Artificial Intelligence and the Reconfiguration of Management Control Systems: An Intellectual Structure and Thematic Evolution Analysis

H.Bouladasse, S. Elganich, and T.Yahyaoui

STSE-V4: AI for Cybersecurity

Session Chairs :

Dr. F. Amounas, FST Errachidia, Morocco

Dr. A. Irshad, Higher Education Department, Punjab

Room: online

76:The Quantum Countdown: Securing Our Digital Future with Post-Quantum Cryptography

S.Dargaoui, A.Blali, M.Azrou, A.El Allaoui, F.Amounas, A.Guezzaz, and A.Alabdulatif

89:A Novel Intelligent Intrusion Detection for Jamming Attacks Using Fuzzy Logic Sugeno in Wireless Body Area Networks

Asmae Bengag, Amina Bengag, and Omar Moussaoui

12:An Unsupervised Learning Approach for Anomaly Detection Using Only Normal Data in Healthcare systems

S.Sabrou, A.Guezzaz, S.Benkirane, and M.Azrou

10:Lightweight Machine Learning for IoT Intrusion Detection: A Data-Efficient Approach with Multi-Dataset Validation

E.Hidsi and H.Mouncif

42:Genetic Algorithm-Based Wrapper Feature Selection for Enhancing Machine Learning Intrusion Detection Systems

H.A. Essarghi, and A.Darouichi

48:Enhancing IoT Network Security: ML, Blockchain and IPFS for Botnet attacks Detection

S. El Airaj, M.Yakine, F.Amounas, M.Azrou, M.Badiy, and S.Bendaoud

Friday, April 24, 2026

Keynote Speaker 3

09:30-10:30

IoT Security and Privacy: Combating Desynchronization & Clogging

Dr. Shehzad Ashraf Chaudhry, Abu Dhabi, United Arab Emirates

Session Chairs:

Dr. S. Agoujl, ENCG Meknes, Morocco

Dr. A. Darouichi, FST Marakech, Morocco

Room: AMPHI (online)

Technical Sessions

10:30-11:45

STSE-P3: Cybersecurity for IoT

Session Chairs :

Dr. M. Eddabbah, EST Essaouira, Morocco

Dr. M. Mohy-eddine, ENSAM Casablanca, Morocco

Room: AMPHI

122:Bridging the Gap Between Security and Performance: A Multi-Criteria Optimization for Edge-Native IIoT Intrusion Detection

A.Blali, S.Dargaoui, M.Azrou, A.Guezzaz, F.Amounas, and A.Alabdulatif

72:Zero-Trust Mutual Authentication for IoMT Using PUF-Derived ECC Keys and Blockchain

A.Benqassmi, F.Amounas, M.Azrou, S.Bendaoud, and M.Badiy

65:An ECC-Based Lightweight Authentication Protocol for Secure IoT Communications

H.Timouhin, M.Badiy, F.Amounas, M.Azrou, and S.Bendaoud

61:Comparative Study of Authentication Protocols for the Internet of Drones (IoD)

N.Rida Allah, F.Amounas, M.Azrou, and S.Bendaoud

STSE-V5: Smart Solutions for Sustainable Environment

Session Chairs :

Dr. A. Hessane, FS Meknes, Morocco

Dr. A. Alabdulatif, Qassim University, Saudi Arabia

Room: Online

18:Territorial Governance as a Lever for Sustainable Environmental Management: Challenges and Perspectives

A.Errakha, R.Daafi, and S.Dfouf

71:Cloud-Centric Analysis of Long-Term Surface Observations for Urban Climate Characterization in a Semi-Arid Environment: The Case of Marrakech (2005–2024)

A.Kabori, C.Zargane, A.Guezzaz, S.Benkirane, M.Azrou, and Z.Kılıç

19:Green artificial intelligence and environmental performance: an empirical approach to the moderating role of digital governance in Moroccan companies

S.Dfouf, K.Errakha, A.Errakha, and H.Fekak

104:A PRISMA-Based Systematic Review of Explainable and User-Centered Tourism Recommender Systems

K.Kabab, K.Errakha, A.Samih, and A.Marzouk

111:Performance management and sustainability: Bibliometric review

Y.lamtaoui, S.Bounid, and Y.Hamnane

96:Climate Change, Environmental Temperature and Urinary Tract Infections in Children in the Casablanca Region, Morocco: A One Health approach

K.Aouni, F.Z. Zayar, K.Azekour, S.Dadda, and B.EL Bouhali

STSE-V6: AI for Environmental Sustainability

Session Chairs :

Dr. A. El Kah, FP Errachidia, Morocco

Dr. H. Hissou, EST Berrechid, Morocco

Room: Online

32:AI-Enabled Imaging for Precision Agriculture: A Survey of Multispectral and RGB Sensing Across Satellite, UAV, and Smartphones Platforms

I.Noury, and A.Azeroual

20:State-of-the-Art Methods for Human Activity Recognition: A Comprehensive Review

M.Benzyane, M. Azrour, and S.Agoujil

93:Popularization of Environmental Artificial Intelligence in Morocco: Between Technological Innovation and Citizen Mediation

O.Mitali, and I.Menkari

15:AI & OR-Driven Smart Irrigation: A Systematic Mapping Study

K.Oufaska, N.Hamani, S.Chahboun, C.Marzouki, D.Haloui, and K.El Yassini

22:Integrated Geospatial Assessment of Climate Change Impacts on Hydrology and Water Resources in the Kunar River Basin

H.Aman, and Z.Kılıç

113:An Automated Multilingual Framework for Document Summarization and Indexing

F.Bouyaakoubi, M.D. El Ouadghiri, L. Tamym, and A. Nait Sidi Moh

90:Contribution to the Assessment of Aquatic Faunal Diversity in the Province of Figuig (Eastern Morocco)

A. Nouayti, A. Abdaoui, A. El Mansour, H. Nouayti, R. Nouayti, S. Ait Boughrous, A. El Mimouni, H. Ouakhir, A. Ait Boughrous, and N. Lahrach

Coffee Break	11:45-12:00
Room: Meeting Foyer	
Technical Sessions	12:00-13:30
STSE-P4: AI for Sustainable and Renewable Energy Session Chairs : <i>Dr. S. Benkirane, EST Essaouira, Morocco</i> <i>Dr. A. Yahyaouy, USMBA, Morocco</i>	
Room: AMPHI	
27: From Detection to Prevention: A Predictive Maintenance Framework for Vegetation Anomaly Management in Moroccan Solar PV Installations <i>C.Zargane, A.Kabori, A.Guezzaz, S.Benkirane, M.Azrou, and Z.Kılıç</i>	
31: Smart Post-Harvest Storage by using IoT Technologies: Opportunities and challenges <i>B.Sidibé, I.Debbarh, S.ElHir, L.El Ansari, M.Sadik and M.Khaldoun</i>	
102: Digital Technologies for Sustainable Development <i>K.Barihsina, and M.Oukassi</i>	
118: AIoT-based smart lighting systems: a systematic mapping study <i>N.Hassani, M.Ouhadou, and N.Ouadoudi</i>	
75: IoT-Enabled Smart Street Lighting for Sustainable Urban Environments: A Multi-Criteria Decision Case Study <i>M.Laandour, M.Ouhadou, Y. El Hassouani, and N. Hassani</i>	
LUNCH	14:00
Closing the Event	