تحت الرعاية السامية لصاحب الجلالة الملك محمد السادس نصره الله

UNDER THE HIGH PATRONAGE OF HIS MAJESTY KING MOHAMMED VI

WELCOME TO
The 6th International Conference on
Artificial Intelligence & Smart Environments

ICAISE'2024 | HYBRID CONFERENCE

▶ **Conference**
PROGRAM

📅 **November, 07-09 , 2024**
📍 **Errachidia, Morocco**

Scan the QR code
for more details

With support of

Moulay Ismail University, Faculty of Sciences and Techniques, Errachidia, Morocco

ICAISE'24 and Workshops
Program Time Slots

Timing GMT+1	Thursday, November 07, 2024					
08:00-09:00	Registration					
09:00-10:00	Opening Ceremony					
10:00-10:30	Coffee Break					
10:30-11:30	Keynote Speaker 1					
11:30-12:30	ICAISE-Poster Session					
13 :00	**LUNCH**					
15:00-16:00	Keynote Speaker 2					
16:00-17:00	Keynote Speaker 3					
17:00-17:15	Coffee Break					
17:15-19:00	**ICAISE-S1**	**ICAISE-S2**	**ICAISE -S3**	**ICAISE -S4**	**ICAISE-S5**	**ICAISE-S6**

Timing GMT+1	Friday, November 08, 2024				
09:00-10:00	**ICAISE-S7**	**ICAISE-S8**	**ICAISE-S9**	**ICAISE-S10**	**ICAISE-S11**
10:00-11:00	Keynote Speaker 5				
11:00-12:00	Keynote Speaker 6				
12:00-12:15	Coffee Break				
12:15-12:45	ICAISE-Poster Session				
14:15	**LUNCH**				
15:30-16:30	Keynote Speaker 7				
16:30-17:30	**ICAISE-S12**	**ICAISE-S13**	**ICAISE-S14**	**ICAISE-S15**	**ICAISE-S16**
17:30-17:45	Coffee Break				
17:45	**ICAISE-S17**	**ICAISE -S18**	**ICAISE -S19**	**ICAISE -S20**	**ICAISE-S21**
	ICAISE-S22			**ICAISE-S23**	

Timing GMT+1	Saturday, November 09, 2024		
09:30-10:30	Keynote Speaker 7		
10:30-11:00	Keynote Speaker 8		
11:00-11:15	Coffee Break & ICAISE-Poster Session		
11:15	**ICAISE-S24**	**ICAISE-S25**	**ICAISE-S26**
	ICAISE-S27	**ICAISE-S28**	**ICAISE-S29** / **ICAISE-S30**
13:30	**LUNCH**		
15 :30	**Excursion and Gala Dinner Invitation in Merzouga**		

SYMPOSIA AND WORKSHOPS

The 3rd International Workshop on Electrical Engineering and Renewable Energy

IWEERE'2024

General Chairs:

Said Ziani, ENSAM, Mohammed V University, Agdal, Morocco

DETAILED PROGRAM

Thursday, November 07, 2024

Registration	08:00-09:00

Room: Registration Room

Opening	09:00-10:00

Opening Ceremony

       Wali of the Drâa-Tafilalet region, Morocco
       President of Moulay Ismail University, Morocco
       President of the Drâa-Tafilalet region, Morocco
       President of the Provincial Council of Errachidia, Morocco
       Dean of FST, Errachidia, Morocco

Room: AMPHI

Coffee Break	10:00-10:30

Room: Meeting Foyer

Keynote Speaker 1	10:30

Cloud Architecture of Soft Skills based on Deep Learning

Dr. Ahmed Asimi, Faculty of Science, Agadir, Morocco

Session Chair: **Dr. Jemal Ahmed,** Higher Institute of Technological Studies, Sfax, Tunisia
      Dr. Mourade Azrour, FST, UMI, Morocco

Room: AMPHI

ICAISE-Poster Session	11:30

Room: Meeting Foyer

LUNCH	13:00

Keynote Speaker 2	15:00

Threat Intelligence and Machine Learning: A Powerful Combination for Cybersecurity

Dr. Hamed Taherdoost, University Canada West. Canada

Session Chair: **Dr. Imad Zeroual**, FST, UMI, Morocco
      Dr. Ahmad El Allaoui, FST, UMI, Morocco

Room: AMPHI

Keynote Speaker 3	16:00

E-CARGO/RBC: A High-Level Computational Model/Methodology for the Complex World in the AI Time

Dr. Haibin Zhu, Faculty of Arts and Science, Canada

Session Chair: **Dr. Badraddine Aghoutane,** FS, UMI, Morocco
      Dr. Ali Yahyaouy, University Sidi Mohamed Ben Abdellah. Fez. Morocco

Room: AMPHI

Coffee Break	17:00

Room: Meeting Foyer

ICAISE-S1: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Youness Jouilil, FS, Hassan II University, Morocco
          Dr. Adelaaziz Hessan, Faculty of Sciences, UMI, Meknes, Morocco
Room: AMPHI

A Novel Deep Clustering Approach to Assess Dominance Between Solutions of a Multi-Objective Optimization Problem
Raja Ait El Mouden, Ahmed Asimi, Soumia Benkou

A Review of some Semantics Methods for Translating Moroccan Text to Moroccan Sign Language
Benzaid Fatima, Benaddy Mohamed, El Meslouhi Othmane, Boukdir Abdelbasset Oudani Hassan

A Review on Artificial Intelligence for Water Treatment by Desalination Using Reverse Osmosis
Elyaakouby yassine ; Tilioua Amine

A high gain and wideband dual port-based metamaterial MIMO antenna for 5G applications
Ouafae ELALAOUY, Mohammed EL GHZAOUI And Jaouad FOSHI

ICAISE-S2: Smart Environment & Urbanization Applications & Smart Energy Solutions
Session Chair: Dr. Fatima Amounas, FSTE, UMI, Morocco
          Dr. Said Agoujil, ENCG-UMI, Errachidia, Morocco
Room: Room 1

Advances in Solar Energy Forecasting: Integrating Machine Learning and Hybrid Approaches
Hasna Hissou, Said Benkirane, Azidine Guezzaz, Mourade Azrour, and Abderrahim Beni- Hssane

Blockchain-Powered Solar Synergy: Advancing Morocco's Renewable Energy Vision
Mohamed Khalifa Boutahir, Abdelaaziz Hessane, Ahmed el Youssefi, Ali Omari Alaoui, Yousef Farhaoui, and Mourade Azrour

Machine learning for water resources in Morocco: rapid review
Rachid El Ansari , Mohammed El Bouhadioui , Hicham Boutracheh And Aniss Moumen

Metrics of Attractiveness: Developing a synthetic index for the territorial attractiveness of small towns in Morocco
Khaoula Rihab Khalid, Abdeslam Boudhar1,Sohaib Khalid, Ahmed Elaissaoui, Abderrahman Yassine.

ICAISE –S3: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Yousef Qarrai, FSTE, UMI, Morocco
          Dr. Mohamed Khalifa Boutahir , National School of Artificial Intelligence and Digital Technology, Berkane, Mohammed First University, Oujda, Morocco.
Room: Room 2

Exploring Event Extraction: A Survey of Approaches and Applications
Mohamed Tayyaui, Anass Elhaddadi, Tarik Boudaa

Graph Convolutional Network for Link Prediction in Social Networks
Mohamed Badiy, Fatima Amounas, and Younes Bayane

Implementation of a CPML layer using FDTD method case of Electromagnetic Wave Propagation Isotropic Homogeneous Medium
Mohammed Nassri, Sara Teidj, And Ali El Alami

Improved Fault Classification in Photovoltaic Panels Using kNN Machine Learning
Abdelilah Khlifi, Yamina Khlifi

Solar Energy Prediction in Holy City of Mecca Using LSTM: Enhanced with ICA, PCA, CSP, and DWT
Hafid Ben Hachour, Said Ziani, Mohamed EL Ghmary, Hassan Echoukairi

ICAISE-S4: Artificial Intelligence Solutions in Health
Session Chair: Dr. Abdelhamid Zouhair, University of Abdelmalek Essaadi, Morocco
Dr. Mohamed Khalifa Boutahir , National School of Artificial Intelligence and Digital Technology, Berkane, Mohammed First University, Oujda, Morocco.
Room: Online

A novel method for generating Ultrasound Report Generation using A multi-modal feature fusion
Fatima Cheddi, Ahmed Habbani , Hammadi Nait-Charif

Advancements and Challenges in AI-Driven Medical IoT Systems for Personalized Healthcare
Anass Boujanane, Mohammed Mahfoudi, Fatna Elmendili, Mohammed Fattah, Said Mazer, Moulhime El Bekkali

Advancements in Cervical Cancer Diagnostic Using Deep Learning: A State-of-the-Art Review
Oussama EL GARRAI, Othmane El Meslouhi And Karim Abouelmehdi

Alcoholic EEG Classification Multichannel FFT Image
Achmad Rizal, Donny Setiawan Beu, Said Ziani

Analysis of Depressed Patients' Sentiments towards Treatment: AI Approach for Healthcare Professionals
Maria El-Badaoui, Noreddine Gherabi and Fatima Qanouni

Computational Analysis of Human Locomotor patterns in Virtual Carpet Paradigm™ Using Ant Colony Algorithm
Ihababdelbasset annaki, Mohammed Rahmoune

ICAISE-S5: Artificial Intelligence Solutions in Health
Session Chair: Dr. Youness Abou El Hanoune, University of Abdelmalek Essaadi, Morocco
Dr. Ahmed Boujraf, University of Abdelmalek Essaadi, Morocco
Room: Online

Gene Selection for Cancer Classification Using Minimal Dominant Independent Set''
Bir-Jmel Ahmed, DOUIRI Sidi Mohamed, And El Bernoussi Souad

Integration of Generative AI and Multimodal Deep Learning for Early Detection of Chemotherapy-Induced Cardiotoxicity
Bouatmane Ahmed, Daaif Abdelaziz, Bousselham Abdelmajid, and Bouattane Omar

Multi-machine learning models for blood donor prediction: A data analysis and visualization approach
Chaimae Mouncif And Mohamed Amine Ben Rabia And Adil Bellabdaoui

RCSF & IOT In Monitoring of Obstructive Sleep Apnea
Achraf Aizi, Abdelhafid Ait Elmahjoub, Abdelwahid Touati

Smart environment and patient experience: a systematic literature review
Nouhaila Ben Khizzou, Mourad Aarabe, Meryem Bouizgar, Lhoussaine Alla, And Ahmed Benjelloun

ICAISE -S6: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Tarik Boudaa, University of Abdelmalek Essaadi, Morocco
Dr. Ahmed Boujraf, University of Abdelmalek Essaadi, Morocco
Dr. Ahmed Lahjouji EL IDRISSI, University of Abdelmalek Essaadi, Morocco
Room: Online

A Comparative Analysis of Transformer Models for the Prediction of Arabic Punctuation
Aboutaib Abdelkarim, El Allaoui Ahmad, Zeroual Imad

A Deep Learning Framework for Pedestrian Detection from FMCW Radar Data
Ayoub Fedjikh, Dounia Dadghouj, Mohammed Fattah, Mohammed Mahfoudi, Wafae El Hamdani, Said Mazer Moulhime El Bakkali

A Hybrid Method for Student Engagement Recognition Using Handcrafted Features and Vision Transformer
Amimi Rajae, Radgui Amina, Ibn El Haj Elhassane

A hybridized simulated annealing algorithm for solving the multi-compartment vehicle routing problem with stochastic customers
Chaymaa Beneich and Sidi Mohamed Douiri

A Novel Deep Ordinal Neural Network Model for Guava Fruit Quality Control
Issam Elhammouti, Addarrazi Ilham, Mohamed El Merouani

Advanced Sarcasm Detection in Arabic Text Integrating AraBERT with Sequential RNN Layers

Abderrahim Ouza, Mohamed El Ghmary and Ali Choukri

Friday, November 08, 2024

Technical Sessions	09:00

ICAISE-S7: Artificial Intelligence Solutions in Health
Session Chair: Dr. El Arbi Abdellaoui Alaoui, ENS, Moulay Ismail University of Meknes, Morocco
Dr. Abderrahime Khafaji, HACA, Morocco
Room: AMPHI

A Survey on Image based ulcer detection
Abbar Fatima , Bellamine Insaf ,Abdelkaher Ait Abdelouahad

Comparative Analysis of Advanced Deep Learning Models for Depression and Suicide Detection on Social Media
Brahim Louardi, Assia Ennouni, Achraf Jallaglag, Abdelouahed Sabri, Badraddine Aghoutane, And Abdellah Aarab

Fine-Tunning a French Language Model for Identifying Emergency Queries in Diabetes Chatbot
Zerouani Hajar ; Haqiq Abdelhay. Bounabat Bouchaib.

Vis-To-Nav: Visual Autonomous Navigation for Mobile Robots with a Limited Field of View
Ahmed Regragui, Said Benhlima And Ali Bekri

Enhancing last-mile delivery efficiency through connected vehicle technology and collaborative logistics A systematic literature review
Hafsa Hmama, Ali El Oualidi, Hasna Mharzi

ICAISE-S8: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Mohamed Fattah, Moulay Ismail University of Meknes, Morocco
Dr. Mouhsine Mohoch, Moulay Ismail University of Meknes, Morocco
Room: Room 1

Efficient Image Segmentation using Dominant Sets
Abdelbasset Mansouri and My Driss Aouragh

Enhancing Deep Learning Models for Date Palm Disease Classification through Advanced Attention Mechanisms
Abdelaaziz Hessane, Amine El Hanafy, Ahmed El Youssefi, Mohamed Khalifa Boutahir, El Arbi Abdellaoui Alaoui, Yousef Farhaoui

Enhancing Handwritten Character Recognition Using a Hybrid SVM-CNN Model
Mohamed Rida Fethi, Othmane Farhaoui, Ali Omari Alaoui, Imad Zeroual and Ahmad El Allaoui

Evaluating CNN and Hybrid CNN-LSTM Models for Arabic Handwritten Character Recognition
Othmane Farhaoui, Mohamed Rida Fethi, Ali Omari Alaoui, Imad Zeroual and Ahmad El Allaoui

ICAISE-S9: Smart Environment & Urbanization Applications & Smart Energy Solutions
Session Chair : Dr. Youssef Majdob, Hassan2 University Casablanca, Morocco
Dr. Moulay Driss El Ouadghiri, Moulay Ismail University of Meknes, Morocco
Room: Room 2

Modeling and Energy Study of a Photovoltaic-Thermal (PV/T)
Marouan Ben El Haj, Said Ziani And Omar Ansari

Preserving Privacy during BI to Cloud Migration: An Automated Approach to Data Anonymization
Najia Khouibiri , Yousef Farhaoui

Optimization of a system to enhance photovoltaic module performance while producing thermal energy
Imad Laabab, Said Ziani, Abdellah Benami, and Youssef Agrebi Zorgani

The photovoltaic in Moroccan buildings: energy, environmental, economic and job creation forecast analyses
Othmane Bourhaba; Mustapha Mahdaoui; Mohamed Amin Ben Taher; Mohammed Ahachad

ICAISE-S10: Artificial Intelligence in Financial Technology & Blockchain Solutions
Session Chair: Dr.Sabri Abdelouahed, USMBA, Fes, Morocco

Room: Online
AI integration in finance: a shortfall
Omar El Ghmari, Imad El Ghmari

Blockchain-Based Smart Contracts for Healthcare Data Management
Ayoub Louja, Jamali Abdellah, Layth Sliman, Naja Najib, Drira Ines

Forecasting Volatility with Machine Learning: Case Study of the Dow Jones Industrial Average Index
Khalid Jeaab, Nader Ahmed, Moulay El Mehdi Falloul, Youness Saoudi, and Abdelilah Yassine

Hybrid model based on CNN-LSTM-AM with BiLSTM for short-term gold price prediction
El Qarib Mohamed, Nabil Aababou, Baslam Mohamed, Hamdi Fekkak, Abdelilah Yassine

Impact of Artificial Intelligence on the Informal Sector in Emerging Economies
El Ghmari Imad, El Ghmari Omar

XAI-Driven Credit Risk Modeling: A Comparative Analyses of Model Performance and Interpretability
Haji Abdelilah - Hssina Badr

Bricks charting and deep learning model for cryptocurrency forecasting
Ahmed El Youssefi, Hamid Jabrane, Abdelaaziz Hessane, Imad Zeroual, Yousef Farhaoui

Ensemble learning based bitcoin daily price log return forecasting
Ahmed El Youssefi, Mounia Alaoui, Abdelaaziz Hessane, Imad Zeroual, Yousef Farhaoui

Towards an architecture for an automated cryptocurrency algorithmic trading system
Ahmed El Youssefi, Ali Omari Alaoui, Abdelaaziz Hessane, Mohamed Khalifa Boutahir, Imad Zeroual, Yousef Farhaoui

A Machine Learning Approach for Overcoming Traffic Sign Detection Challenges
Fatima Qanouni, Hakim El Massari, Noreddine Gherabi, Maria EL Badaoui

ICAISE-S11: Big Data & Data Science & Generative Artificial Intelligence
Session Chair: Dr. Jamal Riffi, USMBA, Fes, Morocco
Room: Online
Integration of Machine Learning Algorithms in Sentiment Analysis of Arabic Language on Social Media: Study and Performance
Sanae Tbaikhi, Hamza Jakha, Souad El Houssaini, Mohammed-Alamine El Houssaini and Jamal El Kafi

Intelligent information processing in CRM through Big Data Analytics: a systematic literature review
Ikram Ed-Daakouri, Naoual Bouhtati And Lhoussaine Alla

The progressive journey from IT-enabled organizational transformation to digital transformation
Ahmed Iraqi

Artificial Intelligence full potential yet attained in the e-participation
Zaineb Berra, Sara Arezki

The Evolution of Teaching and Training in the Age of Artificial General Intelligence Opportunities, Challenges, and Ethical Considerations
Machkour Badr & Abriane Ahmed

Highlighting Real-Time Information impact on passenger perception of bus service quality and satisfaction
Souassi Mohamed Amine, Hnaka Zainab

Data privacy in the light of Big Data
Safae Sossi Alaoui and Yousef Farhaoui

Alcoholic EEG Classification Multichannel FFT Image
Achmad Rizal1, Donny Setiawan Beu1, Said Ziani

Keynote Speaker 4 10:00

The Era of Large Language Models

Dr. Imad Zeroual, FST, UMI, Morocco
Session Chair: **Dr. Moulay Driss El Ouadghiri**, Moulay Ismail University of Meknes, Morocco
        Dr. Jemal Ahmed, Higher Institute of Technological Studies, Sfax, Tunisia
Room: AMPHI

Keynote Speaker 5 11:00

eGovernment Whole-of Government Approach for Good Governance The Back-Office Integrated Management

Dr. Said Azelmad, FST, UMI, Morocco
Session Chair: **Dr. Said Agoujil**, ENCG-UMI, Errachidia, Morocco
        Dr. Abderrahime Khafaji, HACA, Morocco
Room: AMPHI

Coffee Break 12:00
Room: Meeting Foyer

ICAISE-Poster Session 12:15
Room: Meeting Foyer

LUNCH 14:15

Keynote Speaker 6 15:30

Challenges in the Next Generation of IoT-based Smart Systems and a Case Study

Dr. Xiaodong Liu, School of Computing Engineering and the Built Environment, UK
Session Chair: **Dr**. **Said Ziani**, ENSAM-UM5, Rabat, Morocco
        Dr. Jemal Ahmed, Higher Institute of Technological Studies, Sfax, Tunisia
Room: AMPHI

Technical Sessions 16:30

ICAISE-S12: Internet of Things & Network & Security
Session Chair: Dr. Mourade Azrour, FSTE, UMI, Morocco
        Dr. Fatima Amounas, FSTE, UMI, Morocco
Room: AMPHI

Hybrid Approach for IoT-based Medical image Encryption and Compression using Modified AES and Chaos Theory
Khadija El Kinani, Fatima Amounas, Salma Bendaoud and Younes Bayane
A Robust RFID-Authentication Scheme using Elliptic Curve Cryptography for IoT-Healthcare Ecosystem
Hind Timouhin, Fatima Amounas and Salma Bendaoud
Adaptive Machine Learning-Based Intrusion Detection Systems for IoT Networks: A Dynamic Approach
Arjdal Rguibi, Asimi Younes, Asimi Ahmed, Oumous Lahcen
Conception of a Symmetric Fully Homomorphic Protocol based on Gentry Scheme
Soumia Benkou, Ahmed Asimi, Raja Ait Lmouden And Mbarek Lahdoud
Enhancing IoT security with a Decentralized Collaborative Intrusion Detection System Using IPFS and Blockchain Technology

Soufian El airaj, Fatima Amounas and Mohamed Badiy

ICAISE-S13: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Badraddine Aghoutane**,** FS, UMI, Morocco
                  Dr. Ali Yahyaouy, University Sidi Mohamed Ben Abdellah. Fez. Morocco
Room: Room1

Innovative Reinforcement Learning agent for HVAC Control in Residential Buildings: A BOPTEST Evaluation
Youssef Boutahri And Amine Tilioua
Lane Detection using Computer Vision Techniques
Soumia El-Ouassouli, Abdelmajid Badri, Aicha Sahel
Literature Review on Smart Student Orientation Based on Recommendation Systems
Charaf Hamidi , salma gaou, hicham tribak , mehdi gaou
Machine Learning for Detecting Fake Accounts in OSNs: A Review
Amine Sallah, Hayat Sahlaoui, Hanae Errousso,El Arbi Abdellaoui Alaoui, Said Agoujil

ICAISE-S14: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Ahmed El Abbassi, FST-UMI, Errachidia, Morocco
                  Dr. Majdob youssef, Hassan2 University Casablanca, Morocco
Room: Room2

Machine Learning-Based Approach for Railway Switch and Crossing System Diagnosis
Zakariya Belghiti - Asma Ladj - Lamiaa Elmenzhi
Mathematical Modeling of Monetary Poverty by K-Near- est Neighbors Algorithm"
El aachab Yassine , Kaicer Mohammed and Jouilil Youness
Plant disease classification using deep learning and the hyperband strategy
Noredine Hajraoui, Mourade Azrour, Yousef Farhaoui, Ahmad El Allaoui
Pricing European Put Options Using Deep Neural Networks: An Application of the Black-Scholes Model
Elbayed Zakaria, Abdelmjid Qadi El Idrissi

ICAISE-S15: Internet of Things & Networks & Security
Session Chair: Dr. Azidine Geuzzaz, EST Essaouira, University of Cadi Ayyad, Morocco

Room: Online

A Comprehensive Review of AI-Empowered IoT services in 6G Networks, Emerging Technologies and Innovative Applications
Mohammed Mahfoudi, Mohammed Fattah, Anass Boujanane, Yahya Rbah, Moulhime El Bekkali
A Novel Wideband Four Ports MIMO Antenna For mm-wave 5G Applications
Nour El Houda Nasri , Mohammed El Ghzaoui, Mohammed Fattah
A Survey on ZigBee Indoor Distance Measurement
Osatohanmwen Noghayin Enehizena; Kingsley Osaro Ogbeide; Agbotiname Lucky Imoize; Yousef Farhaoui
Advanced MachineLearning for Cybersecurity: A Robust Dataset and Evaluation of IDS Algorithm
Mansour lmkaiti,Youness Belaadel,Houda Moudni,Hicham Mouncif
AI and Blockchain in IoT for a Robust Edge-Based RFID Healthcare System
Rajae Tamri, Hassan Oubelouhy, Jilali Antari, Radouane Iqdour
Enhancing Quality of Service in 5G/6G Networks: Innovative Approaches
Chahbi Khadija- Mohammed Mahfoudi - Fatna El Mendili - Mohammed Fattah - Said Mazer -Moulhime El Bakkali

ICAISE-S16: Smart Environment & Urbanization Applications & Smart Energy Solutions
Session Chair: Dr. Said Benkirane, EST Essaouira, University of Cadi Ayyad, Morocco
                  Dr. Bouchaib CHERRADI, Chouaib Doukkali, University, Morocco
Room: Online
Decision-Making Process Improvement Through the Internet of Behaviors and Digital Nudges Techniques for Financial Industry Customers
Imane Moustati, Noreddine Gherabi, Mostafa Saadi
Enhancing Urban Pollution Reduction via Reinforcement Learning-Based Traffic Light Optimization

Essamlali Ismail, Nhaila Hasna , El Khaili Mohamed
Integrating Augmented Reality and IoT Sensors for Advanced Real-Time Greenhouse Control
Hicham Slimani, Jamal El Mhamdi, Abdelilah Jilbab
Load Frequency Control of a Microgrid Employing a Fuzzy-PID Controller based Hybrid Algorithm hPSOGWO
Abdessamade Bouaddi, Mohammed Ferfra, Reda Rabeh, Nahla Idrissi Chehaibi
Optimal location of high/low voltage transformer stations by K-Means method and scheduling of electric meters
Redouane Touil , Rachid Marrakh , Taoufiq Belhoussine Drissi , Bahloul Bensassi
Optimizing the Vehicle Routing Problem in Solid Waste Management Using Artificial Intelligence
Hanane Ait Elasri, Driss Khomsi and Semlali Aouragh Hassan
ZigBee Wireless Sensor Network Design for Environmental Monitoring
Osatohanmwen Noghayin Enehizena; Kingsley Osaro Ogbeide; Yousef Farhaoui; Agbotiname Lucky Imoize

Coffee Break	17:30

Room: Meeting Foyer

Technical Sessions	17:45

ICAISE-S17: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Imad Zeroual, FSTE, UMI, Morocco
Dr. Mohammed Merzougui, FSJES, Oujda, Morocco
Room: AMPHI

Scoping Review of YOLO Applications in Emergency Vehicle Detection
Ali Omari Alaoui, Abdelaaziz Hessane, Ahmed El Youssefi, Mohamed Khalifa Boutahir and Ahmad El Allaoui
Smart Intrusion Detection System in Cloud Computing : A Systematic Review
Saloua Bellouch, Siham Aouad, Mostapha Zbakh
Virtual Resource Optimization using Artificial Intelligence in Hyperconverged Environment
Hassan Echoukairi, Mohamed EL Ghmary, Said Ziani, Asmae Aladgham

ICAISE –S18: Artificial Intelligence in Financial Technology & Blockchain Solutions
Session Chair: Dr. Said Ziani, ENSAM-UM5, Rabat, Morocco
Room: Room 1

Blockchain and Attacks Optimizing Post-Quantum Blockchain Performance Through Adaptive Block Segmentation: A Comparative Study
Dahhak Hajar, Nadia Afifi, Imane Hilal
Quantum-Assisted Hyperparameter Tuning Challenge for Financial Fraud Detection
Chaima Ehbali,
The effects of Fintechs on the Financial Performance: An Empirical Study Based on Moroccan innovative companies
Abdel-Ylah Amazzal, Mohamed EL Ghadouia,
Hybridation intelligence artificielle et Simulation du réacteur de production d'acide phosphorique
Ahmed Bichri, Souad Abderafi

ICAISE –S19: Deep Learning and Applied Mathematics
Session Chair: Dr.Mohammed Moumni, FST-UMI, Errachidia, Morocco
Dr.Abdesslem Alaoui Lamrani, FST-UMI, Errachidia, Morocco
Dr.Yassine Sabbar, FST-UMI, Errachidia, Morocco
Dr.Sidi Mohamed Douiri, FST-UMI, Errachidia, Morocco
Dr.Hamid Oulghazi, FST-UMI, Errachidia, Morocco
Room: Room 2

Optimal choice of thermal diffusivity by deep learning for image denoising using heat equation
Hafida Kharro,, Sidi Mohamed Douiri And Mohammed Moumni

Image Denoising Enhancement through a regularized Perona-Malik diffusion model
Hind Farjil, Sidi Mohamed Douiri And Mohammed Moumni

Deep Learning approach and Nonlinear Feynman—Kac Formula for Micromagnetism Modelin

Fatima-Ezzahrae Bahou, Mohammed Moumni And Yassine Sabbar

Analysis of a SIR epidemiological model with Lévy jumps: A stochastic approach to infectious disease dynamics

Brahim Boutkhamouine, Yassine Sabbar And Mohammed Moumni

Two lower order terms and data measure for nonlinear parabolic problems in Musielak spaces

Ismail Haddani, Sidi Mohamed Douiri And Mohammed Moumni

Existence and Regularity of solutions to a singular degenerate elliptic equation with natural growth in the gradient

Lhoussaine Kabouri, Sidi Mohamed Douiri

ICAISE -S20: Internet of Things & Networks & Security
Session Chair: Dr. Khalid El Fazazy, USMBA, Fes, Morocco

Room: Online

Exploring the Applications of the Internet of Things in Education and Training: Innovations and Future Perspectives
Machkour Badr & Abriane Ahmed

Federated Learning for Intrusion Detection: Opportunities and Challenges
Chakir Oumaima and Yassine Sadqi

Integration of MQTT and CoAP Protocols inOneM2M for IoT Applications
Et-Tousy Jamal, Zyane Abdellah

Introduction to Quantum-Resistant Cryptography in Payment Systems
Nouhaila Hanbali, Ahmed El-Yahyaoui, Ali Ouacha And Chaima Eh-Bali

Securing the Future of Healthcare: Analyzing Cybersecurity Vulnerabilities for Confidentiality and Privacy in IoMT Devices
Salma Bouziane, Mohammed Mahfoudi, Fatna El Mendili, Mohammed Fattah, Said Mazer, Moulhime El Bakkali

The nexus between renewable energy and Industry 5.0: A data-driven approach
Lamiae Sarsar

ICAISE-S21: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Mohammed Merzougui, FSJES, Oujda, Morocco
　　　　　　　 Dr. EL Wardani Dadi, University of Abdelmalek Essaadi, Morocco
　　　　　　　 Dr. Ali Benaissa, University of Abdelmalek Essaadi, Morocco
Room: Online

Toward a QoS improvement in IoT by Combining Fuzzy Logic and Machine Learning Algorithms
Lagnfdi Oussama, Myyara Marouane, Darif Anouar.

Integration of Multi-Agent Systems in Intelligent Tutorial Systems

Zakaria Rida, Hadhoum Boukachour, Mourad Ennaji and Mustapha Machkour

Construction and Prediction of American Sign Language Using Deep Learning

Cherrate Meryem, Sabri My.Abdelouahed, Yahyaouy Ali, Aarab Abdellah

Enhancing Financial Decision-Making with Explainable Artificial Intelligence: A Case Study in Credit Risk Assessment

Mohamed Ikermane, Youssef Rachidi

Comparison between IPv4 and IPv6 in order to economize the energy for the Wireless Sensor Network

Oumayma El Gatte, Ahmed El Abbassi, Omar Mouhib

ICAISE-S22: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Abdelhamid Zouhair, University of Abdelmalek Essaadi, Morocco
　　　　　　　 Dr. Ahmed Boujraf, University of Abdelmalek Essaadi, Morocco
Room: Online

AI-Driven Optimization for Energy-Efficient Task Offloading in Mobile Edge Computing
Sara Maftah, Mohamed El Ghmary, Mohamed Amnai

Biomedical ontologies for knowledge discovery from text data: A brief overview
Ech-Chorfi Salah Edine Zemmouri Rl Moukhtar

CNN and Vision Transformer Models for Detecting Cheating in Online Examinations: A Comparative Evaluation

Siham Essahraui, Khalid El Makkaoui, Mouncef Filali Bouami, and Ibrahim Ouahbi
Comparative Analysis of Supervised Machine Learning Classification Models
Mouataz Idrissi Khaldi; Allae Erraissi; Mustapha Hain; Mouad Banane
Comparative Performance Evaluation of Machine Learning Algorithms in Sentiment Analysis
Kamal Walji , Allae Erraissi , Abdelali Zakrani And Mouad Banane
Comparative Study of Machine Learning and Deep Learning Models for Prediction and Detection of Forest Fire
Chaimae Ouazri _ Abderrahim El Mhouti _ Mohamed Fahim

ICAISE-S23: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Tarik Boudaa, University of Abdelmalek Essaadi, Morocco
Dr. Nabil Kannouf, University of Abdelmalek Essaadi, Morocco
Dr. Fouzia Moradi, University of Abdelmalek Essaadi, Morocco
Room: Online

Cryptocurrency price forecasting: A comparative analysis of machine learning and deep learning methods
Rachid Bourday, Issam Aatouchi, Mounir Ait Kerroum And Ali Zaaouat
Deep Learning-Based Sentiment Analysis of Coursera Reviews Using LSTM Neural Networks
Raja Ouadad and Hicham Mouncif
Design and Optimization of Fractal Multiband Antenna for mmWave Applications
Abdelhafid Es-Saqy, Maryam Abata, Salah-Eddine Didi, Mohammed Fattah, Said Mazer and Moulhime El Bekkali
Design of Compact Band pass Filter Using Metamaterial Cell Unit Structures for Modern Communication Systems
Youssef Khardioui, Ali El Alami, Mohammed El Ghzaoui
Efficient Data Preprocessing for Ecological Quality Assessment in Marine Environments
Houria Braikia , Sana Ben Hamida , Marta Rukoz
Enhanced Facial Recognition using Parametrized Relu Activation in Convolutional Neural Networks
Hassan Afifi, Abdallah Marhraoui Hsain, Mostafa Merras, Aziz Bouazi, Idriss Chana

Keynote Speaker 7   **09:30**

Blockchain-based IoT Platforms for smart Farming Systems

Dr. Mohamed BAKHOUYA, International University of Rabat, Morocco

Session Chair: **Dr. Said Agoujil**, ENCG-UMI, Meknes, Morocco

Dr. Fatima Amounas, FSTE, UMI, Morocco

Room: AMPHI

Keynote Speaker 8   **10:30**

Digital Health Focused on Adolescents and Youth

Dr. Issam El Kouarty, Division Santé Scolaire et Universitaire, Direction de la Population, Ministère de la Santé et de la Protection Sociale, Maroc

Session Chair: **Dr. Fatima Amounas**, FSTE, UMI, Morocco

Room: AMPHI

Coffee Break   **11:00**

Room: Meeting Foyer

Technical Sessions   **11:15**

ICAISE –S24: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Jallouli Bassem, Higher Institute of Technological Studies, Sfax, Tunisia
Dr. Mezghani Najoua, Higher Institute of Technological Studies, Sfax, Tunisia
Room: AMPHI

Ara-DAQUAR : into Arabic Question Answering on real world images
Khenchouch Mohamed, Imad Zeroual, Anoual El Kah
Graph-Based Matching for High-Resolution Images Using SIFT Features and ML Metrics
Omaima El Bahi, Youssef Qaraai, Ahmad El Allaoui
A Fully Convolutional Neural Network Approach for Document Text Detection
Fatima Ez-Zahra Hasnaoui, Youssef Qaraai, Mohamed Sabiri
A Review on Artificial Intelligence for Water Treatment by Desalination Using Reverse Osmosis
Elyaakouby Yassine, Tilioua Amine
Optimization of K-Nearest Neighbors for Hematoma Prediction in Totally Implantable Venous Access ports
El Oualy Hanane, Hajji Bekkay, Omari Mouhsine, Madani Hamid
Machine Learning Boosting Techniques for Predicting TIVAP Obstructions
El Oualy Hanane, Hajji Bekkay, Omari Mouhsine, Madani Hamid
Use of Deep Learning Techniques for Classification and Prediction of High School Students Needing Academic Support
Mohamed Sabiri , Yousef Farhaoui , Said Agoujil

ICAISE –S25: Artificial Intelligence in Financial Technology & Blockchain Solutions
Session Chair: Dr. Fedia El Mabrouk, Higher Institute of Technological Studies, Sfax, Tunisia
Dr. Rubayyi Turki, College of Science, Imam Mohammad Ibn Saud Islamic University, Riyadh, Saudi Arabia
Room: Room 1
Tourist attractiveness based on intelligent digital technologies: a major challenge to take up in the era of digitalization of processes.
Ali El-Alaoui - Khalid Lali

L'audit interne à l'ère numérique : Défis et opportunités
Youb Manal, Ouslimane Driss, Sekaki Yassine

The two-step approach of a multidimensional model for Adaptive Learning
Manal Elfoudali , Ayoub Ait Lahcen

Detecting Tuberculosis disease from chest X-ray using deep learning
Zaynab Boujelb, Achraf Benba, El Mahjoub Chakir, Ahmed Idrissi, Youssef Achenani

The Alliance of Critical Discourse analysis and Artificial Intelligence in Uncovering the reconstructed reality: Plastic Surgery and Hollywood Smile Images as case Study.
Rzyek Lalla Zhour

Bolckchain technology in supply chain finance: an in depth review and future research directions
halima semaa, youssef malhouni,laila bouzarra ,hanae kerrouch ,mohamed ait hou

ICAISE-S26: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Mohammed Merzougui, FSJES, Oujda, Morocco
                 Dr. El Wardani DADI, University of Abdelmalek Essaadi, Morocco
                 Dr. Ali Benaissa, University of Abdelmalek Essaadi, Morocco
Room: Online

Enhancing Student Attendance Systems Using Palmprint Biometrics with EfficientNet and Vision Transformer Models
Slimane Ennajar, Kamal Bella, Khalid Ait ben Hamou, Yassine ait Lahcen, Walid Bouarifi

Feature Selection Techniques for Linear Regression in Solar Irradiance Forecasting
Mohamed Yassine Rhafes, Omar Moussaoui, Maria Simona Raboaca

Harnessing artificial intelligence in mobile health for diabetes management: A systematic review.
Hind Bourkhime, Noura Qarmiche, Mohammed Omari, Nouhaila Charef, Somaia Elghazi, Nabil Tachfouti, Samira EL Fakir, Mohamed Berraho, and Nada Otmani

Identifying and Preventing Fraudulent Activities in Financial Transactions Using Artificial Intelligence
Aadil Bouchra

Industry 4.0 and sustainable development : evolving from eco-friendly economic models to digital sustainability
Vandapuye Sophia and Jabraoui Siham

Integration of Artificial Intelligence in Sales Funnels for Personalized Recommendations in E-commerce
Rabhi Ouzayr, Esbai Redouane

Advancements in Indoor Environmental Quality Monitoring: A Review of Data-Driven Models and Smart Sensor Technologies
Rachid Kidari, Amine Tilioua

ICAISE-S27: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Chawki El Balmany, ENSA-Khouribga, SMS University,Morocco
                 Dr. Fayçal MESSAOUDI, ENCG, Sidi Mohamed Ben Abdellah University, Morocco
                 Dr. Abdelkhalek Bahri, University of Abdelmalek Essaadi, Morocco
                 Dr. Imad Badi, University of Abdelmalek Essaadi, Morocco
Room: Online

Intelligent Radar Systems: A Comprehensive Study of Cognitive Radar's Evolution and Principles
Oumaima Ez-Zghouli, Dounia Dadghouj, Mohammed Fattah, Mohammed Mahfoudi, Wafae El Hamdani, Said Mazer, Moulhime El Bakkali

Leveraging Federated Learning for Detecting Fraud in Banking Systems
Abbassi Hanae, El Mendili Saida, And Gahi Youssef

Metamaterials for Performance Enhancement of THz Patch Antenna for 6G and Biomedical Applications
Siraj Younes, Saidi Alaoui Kaoutar And Foshi Jaouad

Modeling Water Quality Based on Environmental Factors in the Moulouya River Basin: An Ensemble Learning Approach
Sara Bouziane, Badraddine Aghoutane

Moroccan Dates in a Circle of Danger Due to Successive Oasis Fires

Manal Benzyane, Mourade Azrour, and Said Agoujil

Nudging Users Towards Embracing Electronic Payments
Jihad Satri, Hanaa Hachimi, Chakib El Mokhi
Optimizing Workforce Stability: Machine Learning Approaches for Predicting Employee Attrition
Adil Benabou, Fatima Touhami

ICAISE-S28: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Agbotiname Lucky Imoize, University of Lagos, Nigeria
Room: Online
Orwellian Odyssey: Smart Borders and the Imperative for Explainability
Uchenna Nnawuchi & Carlisle George
Recognition of American Sign Language using hard voting
Cherrate Meryem, Sabri My.Abdelouahed, Yahyaouy Ali, Aarab Abdelah
Study and design of a new "MIMO" printed antenna structure for industrial, scientific, and medical applications
Salah-Eddine Didi, Imane Halkhams, Abdelhafid Es-Saqy, Mohammed Fattah, Said Mazer, Moulhime El Bekkali
The impact of artificial intelligence in scientific research
Mariam Filali Allach & Sara Benayache
The impact of Artificial Intelligence on Healthcare : A Comprehensive Review
Hakim El Massari, Noreddine Gherabi, Fatima Qanouni, Sajida Mhammedi
The use of immersive technologies and "serious games" in the context of professional training.
Asbai Mustapha, Et Ghilane Hind,
Understanding AI and Google's broader efforts in AI
Serafeim A. Triantafyllou

ICAISE-S29: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Ragragui Anouar, University of Abdelmalek Essaadi, Morocco
Dr. Aziz Khamjane, University of Abdelmalek Essaadi, Morocco
Dr. Tarik Ahajjam, Hassan II University, Morocco
Room: Online
Extreme gradient boosting and support vector regression for PV Energy forecasting: case amorphous silicon gridconnected PV system
Abdellatif Ait Mansour, Amine Tilioua, Mohammed Touzani
Prediction of Groundwater Level Fluctuations Under Climate Change Based on Machine Learning Algorithms
Abdessamad Elmotawakkil, Nourddine Enneya
A Game-based Learning approach of Google Interland
Serafeim A. Triantafyllou
The two-step approach of a multidimensional model for Adaptive Learning
Manal Elfoudali, Ayoub Ait Lahcen
Vers une Alimentation Durable : Réduction de la Consommation de Viande pour la Santé et l'Environnemen
Zaki rabab
A generic interest-oriented recommender system framework
Loukmane Maada, Badraddine Aghoutane, Khalid Al Fararni, Mohammed Fattah, And Yousef Farhaoui
Modeling Water Quality Based on Environmental Factors in the Moulouya River Basin: An Ensemble Learning Approach
Sara Bouziane, Badraddine Aghoutane
A state-of-the-art of blockchain based image watermarking
Chaimae Chekira, Naima El-Amarty, Hakim El Fadili, and Zakia Lakhliai

ICAISE-S30: Networks & Security & Big Data & Data Science
Session Chair: Dr. Zouhaier Brahmia, University of Sfax, Tunisia
Dr. Hayat Routaib, University of Abdelmalek Essaadi, Morocco
Dr. Oumoulylte Mariame, University of Abdelmalek Essaadi, Morocco
Dr. Agbotiname Lucky Imoize, University of Lagos, Nigeria
Room: Online

Pruning and Quantization of CNN-Based Intrusion Detection Systems for Cyber-Physical Systems
Kamal Bella, Azidine Guezzaz, Said Benkirane, Mourade Azrour, Slimane Ennajar

Enhancing Data Management: The Integration of Data Catalogs and Big Data Solutions
Boufassil Asmae, Bouhafer Fadwa, Cherradi Mohamed, And El Haddadi Anass

Data privacy in the light of Big Data
Safae Sossi Alaoui and Yousef Farhaoui

Assessing Territorial Attractiveness in Moroccan Provinces: A Structural Modeling Approach
Sohaib Khalid ,Khouya Ayoub ,Said El Allali, Jamal El Bouziani And Khaoula Rihab Khalid

Modeling Provincial Attractiveness: A Clustering Approach to Regional Development in Morocco
Sohaib Khalid , Ali Asouab , Jamal El Bouziani, Said El Allali, Khaoula Rihab Khalid

ICAISE –S31: Artificial Intelligence in Financial Technology & Blockchain Solutions
Session Chair: Dr. Tarik Chanyour, Hassan II University, Morocco
Dr. Bouchaib CHERRADI, Chouaib Doukkali, University, Morocco
Dr.S.Gopalakrishnan, Hindustan Institute of Technology and Science, India
Room: Online

The Prosthetic Hand: From Biomimetic Innovation to a Biorealistic Dynamic Approach
Zakariae Mhiriz, Mohammed Bourhaleb, Mohammed Rahmoune, Hicham Hachami

Delving into scientific utilization of Minecraft: An overview
Serafeim A. Triantafyllou, Yousef Farhaoui

Development of an EEG-Controlled Soft Robotics-Based Active Hand Prosthesis for Enhanced Functionality
Zakariae Mhiriz, Mohammed Bourhaleb, Mohammed Rahmoune, Khalid Hachami

Highlighting Real-Time Information impact on passenger perception of bus service quality and satisfaction.
Souassi Mohamed Amine Hnaka Zainab

Intelligent Systems in the Public Sector: A Bibliometric Analysis of Trends, Themes, and Future Directions
Ouissale El gharbaoui, Ikrame El kiyadi , Hayat El Boukhari

ICAISE 2024 - Online Sessions Links

Thursday, November 07, 2024
17:15
ICAISE-S4: https://meet.google.com/ngr-ikow-fqy
ICAISE-S5: https://meet.google.com/ysa-xzku-ptd
ICAISE-S6: https://meet.google.com/bft-mjjc-ozn

Friday, November 08, 2024
09:00
ICAISE-S10: https://meet.google.com/zgn-agey-bvm
ICAISE-S11: https://meet.google.com/mhe-whhh-esc

16:30
ICAISE-S15: https://meet.google.com/tjm-iude-uvq
ICAISE-S16: https://meet.google.com/pch-vmoy-sxa

17:45
ICAISE -S20: https://meet.google.com/ror-iemx-onv
ICAISE -S21: https://meet.google.com/zhj-rgnb-wfs
ICAISE -S22: https://meet.google.com/aow-ydvw-uab
ICAISE -S23: https://meet.google.com/ver-ibzz-ufd

Saturday, November 09, 2024
11:15
ICAISE-S26: https://meet.google.com/rmf-ucfr-qmz
ICAISE-S27: https://meet.google.com/tem-txjk-znv
ICAISE-S28: https://meet.google.com/suo-encp-zhu
ICAISE-S29: https://meet.google.com/iik-ptvt-xxo
ICAISE-S30: https://meet.google.com/nwi-zruj-hwu
ICAISE-S31: https://meet.google.com/sbt-ksyx-uhn