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<thead>
<tr>
<th>Timing</th>
<th>Thursday, November 24, 2022</th>
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<tr>
<td>08:00-09:00</td>
<td>Registration</td>
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<tr>
<td>09:00-10:00</td>
<td>Opening Ceremony</td>
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<td>10:00-10:30</td>
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<tr>
<td>10:30-11:30</td>
<td>Keynote Speaker 1</td>
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<tr>
<td>11:30-12:30</td>
<td>ICAISE-Poster Session</td>
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<td>13:00</td>
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<tr>
<td>15:00-16:00</td>
<td>Keynote Speaker 2</td>
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<td>16:00-17:00</td>
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<tr>
<td>09:00-10:00</td>
<td>Keynote Speaker 4</td>
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<td>10:00-11:00</td>
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<td>15:30-16:30</td>
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<td>09:00-10:00</td>
<td>Keynote Speaker 8</td>
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<td>11:15-12:15</td>
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<td>LUNCH</td>
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<tr>
<td>15:30</td>
<td>Excursion and Visit to ZIZ Valley</td>
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SYMPOSIA AND WORKSHOPS

IWEERE’2022 : The 1st International Workshop on Electrical Engineering and Renewable Energy
General Chairs :
Said Ziani, EST, Hassan II University, Casablanca, Morocco
ENSAM, Mohammed V University, Agdal, Morocco

IWISEN 2022 : The 4th International Workshop on Intelligent Systems and Emergent Networks
General Chairs :
Mohammed FATTAH, EST, Moulay Ismail University, Morocco
Younes BALBOUL, ENSA, USMBA, Fes, Morocco
# DETAILED PROGRAM

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<td>10:00-10:30</td>
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<td>10:30</td>
<td>Keynote Speaker 1</td>
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**Text disambiguation using machine learning and deep learning approaches**

*Dr. Azzeddine Mazroui*, FS, Mohammed First University, Morocco

Session Chair: Dr. Imad Zeroual / Mourad Azrour, FST, UMI, Morocco
Room: AMPHI

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<tr>
<th>Time</th>
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<tr>
<td>11:30</td>
<td>ICAISE-Poster Session</td>
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**LUNCH**

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**Keynote Speaker 2**

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<tbody>
<tr>
<td>15:00</td>
<td>Cloud Architecture of Soft Skills based on Deep Learning</td>
<td>AMPHI</td>
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*Dr. ASIMI Ahmed*, Faculty of Science, Agadir, Morocco

Session Chair: Dr. Azzeddine Mazroui / Ahmad El Allaoui, FS, Mohammed First University, Morocco
Room: AMPHI

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<th>Time</th>
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<tbody>
<tr>
<td>16:00</td>
<td>Blockchain Technology in IoT security and Privacy</td>
<td>AMPHI</td>
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*Dr. Hamed Taherdoost*, Faculty member of University Canada West

Session Chair: Dr. Said Ziani / Yousef Farhaoui, EST, High School of Technology, Hassan 2nd University, Casablanca, Morocco
Room: AMPHI

**Coffee Break**

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<th>Time</th>
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<td>17:00</td>
<td>Coffee Break</td>
<td>Meeting Foyer</td>
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</table>
Technical Sessions 17:15

ICAISE-S1: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Abdelhak Lakhouaja / Azzeddine Mazroui, FS, Mohammed First University, Morocco
Room: AMPHI

- Lexical Simplification of Arabic Educational Texts Through a Classification Approach
  Naoual Nassiri, Safae Berrichi, Abdelhak Lakhouaja, Violetta Cavalli-Sforza, Azzeddine Mazroui
- Autism Spectrum Disorder Screening Using Artificial Neural Network
  Mohamed Ikermane and Abdelkrim El Mouatasim
- Performance Study of Linear and Circular Arrays Based on Wideband DOA Estimation
  Hassan Ougraz, Said Safi, and Miloud Frikel
- Covid-19 dataset analysis: A systematic review
  Anoual El kah and Imad Zeroual
- Impact of Feature Vectorization Methods on Arabic Text Readability Assessment
  Safae Berrichi, Naoual Nassiri, Azzeddine Mazroui, and Abdelhak Lakhouaja

ICAISE-S2: Smart Environment and Applications
Session Chair: Dr. El Miloud JAARA / El Mostafa Daouidi, FS, Mohammed First University, Oujda, Morocco
Room: Room 1

  ENNABIRHA Wafaa, ABOUDOU Abderraouf, MOUTABIR Ahmed
- Monitoring Energy Consumption of Android apps with AppsDrain
  Ayyoub EL OUTMANI, El Miloud JAARA and Mostafa AZIZI
- The use of the surface response methodology of water pre-treatment for a better demineralization.
  Mariem Ennouhi, Sanaa El Aggadi, Jamal Mabrouki, Amale Boutakiout and Mohammed Alaoui El Belghiti
- Towards an Effective Anomaly Detection in Solar Power Plants Using the AE-LSTM-GA approach
  Mohamed Khalifa BOUTAHIR, Yousef FARHAOUI and Mourad AZROUR
- Towards Cd-free Sb2Se3 based solar cells using SCAPS-1D
  Abdelmajid El Khalfi, Lhoussayne Et-taya, Abdellah Benami, Mustapha Sahal, Lahoucine Elmaimouni
- Particle Swarm Optimization to Design Microwave Components based Substrate Integrated Waveguide Technology
  Souad Akkader, Hamid Bouyghf, Abdennaceur Baghdad

IWEERE-S1: Electrical Engineering and Renewable Energy
Session Chair: Said Ziani, EST, Hassan II University, Casablanca, Morocco
Room: Room 2
- Controller based on backstepping technique control of the permanent magnet synchronous machine (PMSM) applied in an electric vehicle (EV)
  Chaou Youssef, Ziani Said, Daoudia Abdelkarim
- Combination of Renewable Energy Source and Battery for Quality of Service of Connected Objects.
  ENNABIRHA Wafaa, ABOU DOU Abderraouf, MOUTABIR Ahmed
- Multi-task Offloading to a MEC Server with Energy and Delay Constraint
  Nouhaila Moussammi, Mohamed El Ghmary, Abdellah Idrissi
- LCL Filter Design and Performance Analysis for PV-Grid Interconnection
  Fadwa BAIJOU, Lhoussine ABAALI
- Elaboration of phosphate glass with controlled release
  El Binna Noureddine, El Abiad Abdelaziz, Hami Wafa, Aouad Hakima
- PI controller and nonlinear backstepping control of Permanent Magnet Synchronous Motor (PMSM)
  Ben Achour Hafid, Ziani Said, El Hassouani Youssef
- Simulation And Analysis Of Buck-Boost Converter Using Sliding Mode Controller For Maximum Power Point Tracking
  B. Bahani, Sana Mouslim, M’hand Oubella, Mohamed Ajaamoum, H Outzguinrimt

ICAISE-S3: Internet Of Things & Security,
Session Chair: Dr. Mohamed Merzougui, FSJES, Mohamed First University, Oujda, Morocco
Room: Online

- Towards Secure SDN-based VANETs Paradigm
  Nabil Nissar, Najib Naja and Abdellah Jamali
- Using the Ethereum blockchain to secure a crowdfunding system in the real estate sector
  Hibatou allah Boulsane, Karim Afdel, Salma El Hajjami
- An Analysis of NDN-IoHT Congestion Control Policies
  Asmaa EL-Bakkouchi, Mohammed ELGhazi, Anas Bouayad, Mohammed Fattah, Mouhime El Bekkali
- An Image Encryption Algorithm based on Substitution and Diffusion Chaotic Boxes
  Younes Qobbi, Abdellah Abid, Samir El Kaddouhi, Abdellatif Jarjar, Mariem Jarjar and Abdelhamid Benazzi
- An image encryption scheme based on DNA sequence operations and chaotic system
  Mariem Jarjar, Abdellah Abid, Younes Qobbi, Samir El Kaddouhi, Abdellhamid Benazzi, Abdellatif Jarjar
- Security of Hadoop Framework in Big data
  Youness Filaly, Nisrine Berros, Hamza Badri, Fatna El mendil, Younes El Bouzekri EL idrissi
Friday, November 25, 2022

Keynote Speaker 4 09:00

Decentralized Platform with AI Inspired Cloud-Edge Computing

Dr. Gyu Myoung Lee, Liverpool John Moores University (LJMU), UK

Session Chair: Dr. Ahmed Assimi, Faculty of Science, Agadir, Morocco
Room: AMPHI

Keynote Speaker 5 10:00

Modelling Digital Economy Via Integrating Innovation And Climate Change

Dr. Elsadig Musa Ahmed, Economics and Technology Management at Multimedia University, Malaysia

Session Chair: Dr. Said Agoujil, ENCG-UMI, Errachidia, Morocco
Room: AMPHI

Coffee Break 11:00
Room: Meeting Foyer

Technical Sessions 11:15

ICAISE-S4: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Naoual Nassiri / Ahmad El Allaoui
Room: AMPHI

➢ A collaborative fog-based healthcare intrusion detection security using Blockchain and Machine Learning
  Maryam Douiba, Said Benkirane, Azidine Guezzaz and Mourade Azrour
➢ A coupled graph theoretic and deep learning approaches for nonrigid image registration
  Omaima El Bahi, Youssef Qaraai and Ahmad El Allaoui
➢ An Innovative Approach for Supervised Link Prediction using Feature Embedding Methods
  Mohamed Badiy, Fatima Amounas and Saleh Bouarafa
➢ Explainable Machine Learning for Identifying Malicious Profiles in Online Social Networks.
  Amine SALLAH, El Arbi Abdellaoui Alaoui and Said Agoujil
➢ Multivariate time series forecasting using recurrent neural network for a complex system
  Rida EL ABASSI, Jaafar Idrais, Abderrahim Sabour and Yassine El Moudene

ICAISE-S5: Smart Environment and Applications
Session Chair: Azidine Guezzaz, EST Essaouira
Room: Room 1

➢ Artificial Intelligence Applications in Date Palm Cultivation and Production: A Scoping Review
  Abdelaaziz Hessane, Ahmed El Youssefi, Youssef Farhaoui, Badraddin Aghoutane, Youssef Qaraai
➢ Artificial Intelligent-based System for Thermal Comfort Control in Smart Building
  Youssef Boutahri, Amine Tilioua
Circuit Analysis of Series and Shunt Rectifier Topologies for RF Energy Harvesting Applications At 5.80 GHz
Salah Ihlou, Ahmed El Abbassi, Abdelmajid El Bakkali, Hafid Tizyi

Estimation of global irradiation on horizontal plane using artificial neural network
Mohammed Benchrifà, Jamal Mabrouki and Rachid Tadili

Geographic Information System for the study of water resources in Chaâba El Hamra, Mohammedia (Morocco)
Jamal Mabrouki, Mohammed Benchrifà, Mariem Ennouhi, karima Azoulay, Imane Bencheikh, Toufik Rachiq, Khadija El-Moustaqim, Naif Al-Jadabi, Mourade Azrour, Abou-elaaz Fatima-zahra, Souad El Hajjaji

CF Recommender system Based on Ontology and Nonnegative Matrix Factorization (NMF)
Sajida Mhammedi, Hakim El Massari, Noreddine Gherabi and Amnai Mohamed

Estimation of global irradiation on horizontal plane using artificial neural network
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CF Recommender system Based on Ontology and Nonnegative Matrix Factorization (NMF)
Sajida Mhammedi, Hakim El Massari, Noreddine Gherabi and Amnai Mohamed

IWISEN-S1: Intelligent Systems and Emergent Networks
Session Chair: Mohammed FATTAH, EST, Moulay Ismail University, Morocco
Younes BALBOUL, ENSA, USMBA, Fes, Morocco
Room: Online

Fuzzy Logic Based Adaptive Second-Order Nonsingular Terminal Sliding Mode Lateral Control for Uncertain Autonomous Vehicle
Moussa Abdilrah, Ayoub Belkhir, Najlae Jennan and El Mehdi Mellouli

Energy Efficiency Optimization Techniques for 5th Generation Cellular Networks
Macoumba Fall, Balboul Younes, Said Mazer, Mohammed Fattah, Mouhime El Bekkali and Ahmed Dooguy Kora

Study and design of a 28/38 GHz bi-band MIMO antenna array element for 5G
Salah-Eddine Didi, Imane Halkhams, Mohammed Fattah, Younes Balboul, Mazer Said and Mouhime El Bekkali

A New Robust Adaptive Control for a Variable Speed Wind Turbine
Sanaa El Bouassi, Zakaria Chalh and El Mehdi Mellouli

Hybrid Congestion Control Mechanism as a Secured Communication Technology for the Internet of Health Things
Asmaa El-Bakkouchi, Mohammed El Ghazi, Anas Bouayad, Mohammed Fattah and Mouhime Elbekkali

Gilbert cell down-conversion mixer for THz Wireless Communication
Abdeladim El Krouk, Abdelhafid Es-Sagy, Mohammed Fattah, Said Mazer, Mouhime El Bekkali and Mahmoud Mehdi

New low-cost flat microfiltration ceramic membrane based on natural Moroccan clays
Khadija ELATAOUI, Youssef ELMAGUANA, Mouhssine, Boutaleb Najat ELHADIRI, Mohamed Waqif, Latifa Saadi

LUNCH 14:15

Keynote Speaker 6 15:30

Utilizing Deep Learning to Secure the IoT System of Smart Cities Against Cyber Threats
Dr. Tanzila Saba, College of Computer and Information Sciences at Prince Sultan University, Riyadh, KSA
Session Chair: Dr. Said Agoujil, ENCG-UMI, Errachidia, Morocco
Room: AMPHI
Keynote Speaker 7 16:30

L’Importance De Traitement de Base de Données dans le Monde Digital

Dr. Ali Khoujmane, Université de Technologie, Texas, USA
Session Chair: Dr. Said Agoujil, ENCG-UMI, Errachidia, Morocco
Room: AMPHI

Coffee Break 17:30-17:45
Room: Meeting Foyer

Technical Sessions 17:45

ICAISE-S6: Internet Of Things & Network
Session Chair: Dr. Mourade Azrour / Fatima Amounas, FSTE, Moulay Ismail University, Morocco
Room: AMPHI

- A new four-ports MIMO Antenna for 5G IoT Applications
  Ouafae Elalaouy, Mohammed Elghzaoui and Jaouad Foshi.
- An Improvement to the Cloud Service Research and Selection System's Usage of the Skyline Algorithm.
  EL Khammar Imane, Mohamed El Ghmary, Abdellah Idrissi
- Faster RFID Authentication scheme based on ECC for improving the Security in IoT environment
  Hind Timouhin, Fatima Amounas and saeleb Bouarafa
- Health Surveillance and Management System using WBSNs
  Mohammed MOUTAIB, Tarik AHAJJAM, Mohammed FATTAH, Yousef FARHAOUI, Badraddine AGHOUTANE and Mouhime EL BEKKALI
- IOT-based intelligent system of real-time data acquisition and transmission for solar photovoltaic features
  Naima Elyanboiy, Mohamed Khala, Ismail Elabbassi, Nourddine Elhajrat, Sara Teidj, Omar Eloutassi and Choukri Messaoudi
- IoT-enabled Smart Agriculture: Security Issues and Applications
  Mouaad Mohy-eddine; Azidine Guezzaz; Said Benkirane; Mourade Azrour;
- Terahertz Antennas: Application, Research Challenges and Future Directions
  Amraoui Youssef, Imane Halkhams, Rachid El Alami, Mohamad Ouazzani Jamil, and Hassan Qidaa
- The realization of 5G network booster using various types of antennas
  Ouafae Elalaouy, Mohammed Elghzaoui and Jaouad Foshi.
- Using MPI to compare between two protocols that allow Paillier cryptosystem to perform homomorphic multiplication
  Hamid El Bouabidi, Mohamed El Ghmary, Sara Maftah, Mohamed Amnai, Ali Ouacha

ICAISE-S7: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Dr. Youssef Qaraai, FSTE, Moulay Ismail University, Morocco
Room: Room1

- Solving a proposed trafic flow model using deep learning and physical constraint
  Mourad HADDIOUI, Youssef Qaraai, Said AGOUJIL and Abderrahman BOUHAMIDI
- The use of Online Social Networks : comparing Moroccan and French communities on Facebook
  Jaafar Idrais, El Moudene Yassine, Rida El Aabbi and Abderrahim Sabour
 ➢ Virtual Communities Homophily Based on Users Posts in Online Social Networks. Case study: 198 Facebook Public Groups
  
  *Yassine El Moudene, Jaafar Idrais, Rida el Abbassi, and Abderrahim Sabour*

 ➢ yolov2 implementation and optimization for Moroccan traffic sign detection
  
  *Imane Taouqi, Abdessamad Kliou, Kebir Chaji and Assia Arsalane*

 ➢ Investment in digital transformation: A key tool for boosting the competitiveness and visibility of Morocco; higher education institutions.
  
  *Khalid LALI, Abdellatif CHAKOR, Moulay Driss HANAFI*

 ➢ The english proficiency and the inevitable resort to digitalization : A direction to follow and adopt to guarantee the success of women entrepreneurs in the world of business and enterprises.
  
  *Khalid Lali, Moulay Driss Hanafi*

### IWEERE–S2: Electrical Engineering and Renewable Energy

**Session Chair:** Said Ziani, EST, Hassan II University, Casablanca, Morocco
Elamri Abdelkebir, EST, Hassan II University, Casablanca, Morocco

**Room:** Room 2

- A new proof of the Sobolev Logarithmic Inequality on the circle R/2πZ
  
  *M’hammed OUYAHI, Ali HAFIDI, Moulay Rchid Sidi Ammi*

- A Nonlinear state observer for the sensorless control of the Permanent Magnet Synchronous Motor
  
  *Ben Achour Hafid, Ziani Said, El Hassouani Youssef*

- Adaptive Neural fuzzy Inference System (ANFIS) in a grid connected-Fuel cell-Electrolyser-Solar PV- Battery-Super Capacitor Energy storage system management
  
  *Ismail Elabbassi, Naima Elyanboiy, Mohamed Khala, Youssef El hassouani, Omar Eloutassi, Sara Teidj, Monsif Ben Messaoud layti, Choukri Messaoudi*

- A review of the application of Artificial Intelligence for weather prediction in Solar Energy: Using Artificial Neural Networks.
  
  *Imad LAABAB, Said ZIANI, Abdellah BENAMI*

- Backstepping control of the Permanent Magnet Synchronous Generator (PMSG) used in a wind power system
  
  *Chaou Youssef, Ziani Said, Daoudia Abdelkarim*

- A literature review of solar cell overheating control
  
  *Imad LAABAB, Said ZIANI, Abdellah BENAMI*

### IWISEN–S2: Intelligent Systems and Emergent Networks

**Session Chair:** Mohammed FATTAH, EST, Moulay Ismail University, Morocco
Younes BALBOUL, ENSA, USMBA, Fes, Morocco

**Room:** Online

- Machine Learning Algorithms for Sales Forecasting: Comparative Analysis
  
  *Manal Loukili, Fayçal Messaoudi and Mohammed El Ghazi*

- Comparative Analysis of Genetic Algorithm and Particle Swarm Optimization in the Edge and Fog Cloud Runtime Environment
  
  *Saad-Eddine Chafi, Balboul Younes, Mohammed Fattah, Said Mazer and Mouihime El Bekkali*

- Disturbance Observer-based Adaptive Sliding Mode Control has parameters optimized by Particle Swarm Optimization for Autonomous Vehicles
  
  *Rachid Alika, El Mehdi Mellouli and El Houssaïne Tissir*

- Enhancement of red emission of Mn2+ ion by energy transfer of Ag+ ions
  
  *Abdelaziz El Abiad, Wafa Hami And Hakima Aouad*
IoT network attack types by application domains
Ouijdane Fadli, Younes Balboul, Mohammed Fattah, Said Mazer and Moulhime Elbekkali

Profiles behavior analysis in Blockchain Social network
Fatima Anter, Fatna Elmendili, Mohammed Fattah and Nabil Mrani

Simple Inter-stage Impedance Matching Technique for 5G mm-Wave Systems
Abdelhafid Es-Saqy, Maryam Abata, Mohammed Fattah, Said Mazer, Mahmoud Mehdi, Moulhime El Bekkali and Catherine Algani

Saturday, November 26, 2022

Keynote Speaker 7 09:00

IoT, Big Data Technologies and Predictive Approaches for the Development of Context-driven Applications
Dr. Mohamed BAKHOUYA, International University of Rabat, Morocco

Session Chair: Dr. Ahmed Assimi, Faculty of Science, Agadir, Morocco
Room: AMPHI

Keynote Speaker 8 10:00

Calculation Techniques for Credit Limit Fixation through Spending Power: Using Artificial Intelligence Measurement
Dr. Valliappan Raju, IIUM, Malaysia

Session Chair: Dr. Mohamed BAKHOUYA, International University of Rabat, Morocco
Room: AMPHI

Coffee Break 11:00
Room: Meeting Foyer

Keynote Speaker 9 11:15

Towards trustworthy Artificial Intelligence enabled assistive healthcare technologies
Dr. Amir Hussain, Founding Director of the Centre of AI and Robotics at Edinburgh Napier University, UK

Session Chair: Dr. Ahmed Assimi, Faculty of Science, Agadir, Morocco
Room: AMPHI

Technical Sessions 12:15

ICAISE-S8: Smart Environment and Applications
Session Chair:
Room: Online

A Machine Learning-based Model for Energy Efficiency Classification of an Unmanned
Aarial Vehicle Joseph Bamidele AWOTUNDE, Micheal Olaolu Arowolo, Agbotiname Lucky IMOIZE, Yousef FARHAOUI, and Abidemi and Emmanuel ADENIYI

- Design of an Adaptive Neuro-Fuzzy Inference System for Photovoltaic System
- Energy management strategy based on Neural Network for hybrid renewable system
- Evaluating the impact of dataset size on univariate prediction techniques for Moroccan agriculture

Benchikh Salma, Jarou Tarik, Nasri Elmechi, Lamrani Roa

Mohammed Benzaouia, Bekkay Hajji, Rabhi Abdelhamid and Adel Melliti

Rachid Ed-daoudi, Altaf Alaoui, Jad ZEROUAOUI, Badia Ettaki, Jamal ZEROUAOUI

- Feature selection impact on time series problems for Solar Radiation forecasting
- How to define a functional charges copybook for an agricultural robot?

Najia AIT HAMMOU, Hajar MOUSANNIF, Brahim LAKSSIR

Hasna Hissou, Said Benkirane, Azidine Guezzaz, Abderrahim Beni-Hssane

El Harche sanae, Chikhaoui Mohamed, Naimi Mustapha.

- Implementation of artificial intelligence methods for solar energy prediction in the Drâa Tafilalet region
- Assessing hydrologic impacts of future land cover change scenarios in a Mediterranean watershed

Abdellatif AIT MANSOUR, Amine TILIOUA, Mohammed TOUZANI

El Harche sanae, Chikhaoui Mohamed, Naimi Mustapha, Merieme Seif-ennasr, abdelwahed Chaaou

ICAISE-S9: Adaptive Systems, Artificial Intelligence and Applications

Session Chair: Online

- A Combined Approach of Computer Vision and NLP for Documents Data Extraction
  Ali Benaissa, Abdelhalak Bahri and Ahmad El Allaoui
- A deep convolutional Neural Networks for the detection of Breast Cancer Using Mammmography Images.
  Nourane Laaffat, Ahmad Outfarouin, Walid Bouarifi, Abdelilah Jraifi
  Fathi El Houssaine, Qafas Ahlam, and Jouilil Youness
- A New CBIR Search Engine with a Vision Transformer Architecture
  Smail Zitan, Imad Zeroual and Said Agoujil
- A new coronary artery stenosis detection method with a Hybrid LSTM-CNN model
  Xavier Lessage, Michal Nedoszytko, Litian Marey, Said Mahmoudi, Olivier DEBAUCHE, and Sidi MAHMOUDI
- A proposed Machine Learning Model for Intrusion Detection in VANET
  Sara AMAOUCHE, Said BENKIRANE, Azidine GUEZZAZ, Mourad AZROU
- A SWOT Analysis for Healthcare using Machine Learning
  Zineb Sabouri, Noreddine Gherabi, Hakim El Massari, Sajida Mhamedi and Mohamed Amnai
- A Systematic Review on LiDAR-based 3D Object Detection
  Adnan ANOUZLA , Mohamed BAKALI EL MOHAMADI, Nabila ZRIRA, Khadija OUAZZANI TOUHAMI
➢ Lie-Trotter and Strang-Marchuk Methods for Modeling the 1D-Transport with Reaction Equation
Inasse EL ARABI, Anas Chafi and Salaheddine Kammouri Alami

ICAISE-S10: Internet Of Things & Network
Session Chair: Online

➢ A Comprehensive Analysis of Novel Intrusion Detection Systems for Internet of Things Networks
Zouhair Chiba, Noreddine Abghour, Khalid Moussaïd, Seddîq El Kasmi Alaoui, Tarik Chanyour, and Oumaima Lifandali
➢ AI applications in smart cities between advantages and security challenge
Mohamed Abdelzai, Chaimaa Hazman, Ahlam Qafas Mouin Jerr, Azidine Guezzaz
➢ An Enhanced Artificial Hummingbird Algorithm for workflow scheduling in cloud
Admâne Talha, Anas Bouayad, Mohhamed Ouçamah, Cherkouaoui Malki
➢ An intelligent Monitoring Approach Based on WiFi Sensing for Smart Hospital
Hicham Boudal, Mohammed Serrhini, and Ahmed Tahiri
➢ BDIV: Healthcare Blockchain data integrity schemes verification on storage Cloud
Soumia Benkou and Ahmed Asimi
➢ Experimental assessment of MPPT based on a neural network controller
Mohammed Benzaoûa, Bekkay Hajji, Rabbi Abdelhamid and Soufyane Benzaoûa
➢ Increasing the efficiency of Industry 4.0 through the use of the digital twin concept
Kawtar AGOUZZAL, Ahmed ABBOU, Abdelghani Hajji
➢ Intrusion detection Framework for IoT-based smart Environments Security
Chaimae Hazman, Said Benkirane, Azidine Guezzaz, Mourad Azroug, Mohamed Abdadaime
➢ PSO Optimization Algorithm for QoS Enhancement in IoT-Enabled WSNs
Abdelkader Benelhouri, Hada Idrissi-Saba and Jilali Antari
➢ Temporal Blockchains for Intelligent Transportation and Autonomous Vehicles Management
Zouhaier Brahmi, Fabio Grandi and Rafik Bouaziz
➢ A sorting-AB approach for an enhanced IDS in cloud environment
Hanaa Attou, Azidine Guezzaz, Said Benkirane, and Mourad Azroug

IWEERE–S3: Electrical Engineering and Renewable Energy
Session Chair: Said Ziani, EST, Hassan II University, Casablanca, Morocco
Elamri Abdelkebir, EST, Hassan II University, Casablanca, Morocco
Room: Online

➢ Towards a Smart Photovoltaic Panel: Numerical and Experimental Study
ATIFI Youness, RAIHANI Abdelhadi KISSAOUI Mohammed, HAJJAJ Mohamed, BOUAADDI Abella
➢ Fetal Electrocardiogram Identification Using Statistical Analysis
ZIANI Said
➢ Miniaturized patch Metamaterial Antenna for 5G 3.5 GHz band
Abdel-Ali LAABDALI, Youssef Mejdoub, Abdelkebir El Amri and Mohamed Tarbouch
➢ Practical Implementation of Pseudo-Random Control in Step-down Choppers and its Efficiency in Mitigating Conducted Electromagnetic Emissions
Zakaria M’barki, Youssef Mejdoub, Kaoutar Sènejai Rhazi
➢ Analysis of Packet Health fields on a WSN MicaZ-Crossbow Platform
Karim LAHMA and Mohamed HAMRAOUI

- A New Robust Adaptive Control for Variable Speed Wind Turbine

Sanae El bouassi, Zakaria Chalh, El Mehdi Mellouli

- Attitude Control of LEO Satellite via LQR based on reaction wheels versus magnetorquer

Taha Ennaciri, Ahmed El Abbassi, Nabil Mrani, Jaouad Foshi.

ICAISE-S11: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: El Wardani Dadi / Aziz Khamjane
Room: Online

- Assessing the improvements brought by artificial intelligence on the prediction of the aerodynamic coefficients
  Zerouaoui Jad, Alaoui Altaf, Ettaki Badia and Chakir El Mahjoub

- Business Intelligence Models for E-Government in Mauritania: A survey
  Mohamed El Moustapha El Arby Chrif, Moustapha Mohamed Saleck, Aichetou Cheikh
  Mohamedou N’Diaye, El Benany Mohamed Mahmoud

- Emotion detection in real-time video using deep learning
  Moulay Lhabib EL HADI and M’barek NASRI

- Facial Emotion Recognition using a GoogLeNet architecture
  Imane Bouslihim and Walid Cherif

- Fake profile identification using Machine Learning
  Fatna el mendili, Fatima zahra louhab, Nisrine Berros, Younes filaly, hamza badri, Younes el idrissi el bouzekri, and mohammed fattah

- Improved Parallel Genetic Algorithm for Fixed Charge Transportation Problem
  Ahmed Lahjouji El Idrissi, Ahmad El Allaoui and Ismail Ezzerrifi Amrani

- Learning Analytics in the teaching of French as a Foreign Language (FLE) and Big Data: What resources? For what skills?
  Sara OUALD CHAIB, Imane JOTI, Samira KHOULJI

ICAISE-S12: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Online
Room: Online

- License Plate Character Recognition system using YOLOv5
  Mohamed El Ghmary, Younes Ouassine and Ali Ouacha

- Machine Learning Application in Precision Marketing: A Systematic Literature Review and Comparative Study
  Nouhaila El Koufi, Abdessamad Belangour, Amine El Koufi and Mourir Sadiq

- Mathematical Modeling of Financial Time Series Volatility: A GARCH Model
  Jouilil Youness and Mentagui Driss

- Parallel Genetic Algorithms, parameters and design
  OUISS Mustapha, ETTAOUFIK Abdelaziz, MARZAK Abdelaziz, and TRAGHA Abderrahim

- Prediction of sudden death due to COVID-19 using machine learning models
  Ibtissam CHOUIA; Sahar SAOUD; Mohamed SADIK

- Road accident forecast using machine learning
  Jihad Satri, Chakib El Mokhi, and Hanaa Hachimi

- Routing protocol based on artificial neural network for vehicular ad hoc networks.
  Bouchra Marzak, Soufiane El Moumni, Mohamed Talea and Zaki Brahmi

ICAISE-S13: Adaptive Systems, Artificial Intelligence and Applications
Session Chair:
Room: Online
Speech Emotion Recognition Using Yet Another Mobile Network Tool
Mayowa Oyedepo OYEDIRAN, Olufemi Samuel OJO, Salil BHARANY, Abidemi Emmanuel ADENIYI, Agbotiname Lucky IMOIZE, Yousef FARHAOUI, and Joseph Bamidele AWOTUNDE

The Artificial Intelligence for Modeling and Predicting Small’s Cities Attractiveness
Khalid Sohaib, Effina Driss and Mohamed Salem Chaabane

The use of a genetic algorithm to alleviate the limited content issue in a content-based recommendation system.
Oumaima Stitini, Soulaïmâne Kaloun, Omar Bencharef

Towards an Integrated Rough Set and Data Modelling Framework for Data Management and Knowledge Extraction
Salem Chakhar and Zouhaier Brahnia

Word Embedding methods of Text Processing in big data a comparative study
Lahcen Idougild and Said Tkatek

Fuzzy Semantic Query Mapping and Processing
Salem Chakhar and Zouhaier Brahnia

Vigenère implemented in two chaotic Feistel laps for medical image encryption followed by genetic mutation
Abid Abdelah, Mariem Jarjar, Abdelhamid Benazzi, Abdelatif Jarjar, Youness Qobbi, Samir El Kaddouhi

ICAISE-S14: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: 
Room: Online

BPMN to UML transformation for MDA approach to represent an EDM acquisition functionality
Soufiane Hakkou, Redouane Esbai, Mohamad achraf Habri and Lamlili El mazoui Nadori Yasser

Smart learning using autonomous chatbot based on NLP techniques
Khadija El azhari, Imane Hilal, Najima Daoudi and Rachida Ajhoun

The transformation method from Business Processes Models by BPMN to the class diagram by UML: CIM to PIM.
Soufiane Hakkou, Redouane Esbai, Med Achoraf Habri and Yasser Lamlili El Mazoui Nadori

Big Data Application in Education: overview
Hanane Aoulad Ali, Chrayah Mohamed, Bouzidi Abdelhamid

An Enhanced Medical Diagnosis System for Malaria and Typhoid Fever using Genetic Neuro-Fuzzy System
Joseph Bamidele AWOTUNDE, Agbotiname Lucky IMOIZE, Dotun Patrick SALAKO and Yousef FARHAOUI

Big data and the effectiveness of tourism marketing: A prospective review of the literature
Naoual BOUHTATI, Majda KAMAL and Lhoussaine ALLA

ICAISE-S15: Adaptive Systems, Artificial Intelligence and Applications
Session Chair: Mohamed Ouhda, EST Khenifra, Sultan Moulay Slimane University, Beni Mellal, Morocco
Room: Online

Prediction Student Performance in E-Learning Environment: Challenge and Opportunity
Hanane Aoulad Ali, Chrayah Mohamed and Bouzidi Abdelhamid

Explainable Prediction of Intelligent DTN Routing
El Arbi ABDELLAOUI ALAOUI, Khalid NASSIR, Stéphane Cédric Kouméto Tékouabou, and Said AGOUJIL

CNN-based Deep Features with Ensemble Learning for COVID-19 classification
Youssra El Idriissi El-Bouzaidi1 and Otman ABDOUN
- Mathematical Modeling of Monetary Poverty: Evidence from Moroccan Case
  EL AACHAB Yassine and KAICER Mohammed

- τJSONPath: A Temporal Extension of the JSONPath Language for the τJSchema Framework
  Zouhaier Brahmia, Fabio Grandi, Safa Brahmia and Rafik Bouaziz