University of Mohamed Khider Biskra, Algeria

Faculty of Sciences & Technology

The IEEE Eighth International Conference on Image and Signal Processing and their Applications

Faculty of Sciences & Technology
Biskra, Algeria

ISPA 2024

Program

Sunday, April 21st

08:00-08:30 : **Registration**

08:30-08:45 : **Official opening**

Professor Mahmoud DEBABECHE, Rector of Mohamed Khider University of Biskra, Algeria
Professor Hatem GHODBANE, Dean of the Faculty of Sciences and Technology,
Biskra University, Algeria

08:45-09:30 : **Plenary conference I**

Chairs: Pr Mimi Malika and Pr Taleb-Ahmed Abdelmalik

Prof Habib Zaidi, Ph.D

Department of Radiology and Medical Informatics, University of Geneva Hospital, Geneva - Switzerland

Adventures in deep learning-assisted multimodality medical imaging wonderland

09:30-10:00 : Coffee Break

Sunday, April 21ˢᵗ

10h15-12h45

Oral Session

Session : Image Processing - *Room I*	Session : Signal Processing - *Room II*
Chairs: **Pr Zine Eddine Baarir and Pr Zaidi Habib**	*Chairs*: **Pr Ouahabi Abdeldjallil and Pr Amir Nakib**
10h15-10h40: <u>Aiman Younas</u> and Hichem Felouat Autism Spectrum Disorder Classification Using The Most Correlated Features	**10h15-10h40:** <u>Ab Waheed Lone,</u> Ahmet Elbir and Nizamettin Aydin**,** Emboli Detection by machine learning algorithms using multi-level feature extraction
10h40-11h05: <u>Kabli Fatima,</u> Smahi Abdeldjalil and Mokhtari Mohamed Localisation and detection of weld defects in patch-based radiographic images using deep learning	**10h40-11h05:** <u>Lallouani Bouchakour</u> Spectro-Temporal Features for Robust Speech Recognition Transcoded With DSR and AMR-NB Codecs Using Deep Neural Networks (4245)
11h05-11h30: <u>Cherifi Mohamed,</u> Mesloub Ammar, El Korso M.d Nabil et al. Dimensionality Reduction for Hyperspectral Image Classification	**11h05-11h30:** <u>Abdelhafid Benchikh</u> and Radhwane Benali Using only scalp EEG to automatic diagnosis of epileptic and Non-Epileptic seizures using a hybrid dataset
11h30-11h55: <u>Houria Latifa,</u> Belkhamsa Noureddine, Cherfa Assia et al Alzheimer's disease classification using Diffusion Tensor Imaging	**11h30-11h55:** <u>Nafissa Sadi-Ahmed,</u> Malika Kedir-Talha, M'Hamed Bellounes et al. Recognition of multiple arm movements from EMG signals
11h55-12h20: <u>Ghania Boukhlifa</u> and Youcef Chibani A Lightweight CNN Design Based on Convolutional Autoencoder for Tomato Disease Identification	**11h55-12h20:** <u>Saoueb Kerdoudi</u> and Larbi Guezouli Automated Heartbeat Classification for Arrhythmia Patients Using a Deep Convolutional Neural Network
12h20-12h45: <u>Mohamed Belmokeddem,</u> Kamila Khemis and Salim Loudjedi Machine Learning Classification for Detecting Laparoscopic Video Distortions.	**12h20-12h45:** <u>Hefaidh Hadef,</u> Mohamed Ala Eddine Baia et al. Effectiveness of time-based methods for the early detection of bearing faults)

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10h15-12h45

Oral Session

Session: Telecommunication - *Room III* *Chairs*: **Pr Abdelhamid Benakcha and Pr Tayeb A. Denidni**	Session: Application - *Room IV* *Chairs*: Pr **Nadjiba Terki and Pr Fella Achouf**
10h15-10h40: <u>Yacine Messai,</u> Fouzia Maamri, Hanane Djellab, et al. Use of meta-heuristic Algorithm to optimise Ericsson propagation Model application on LTE	**10h15-10h40:** <u>Khalida Mimoune,</u> Mohamed Yacine Hammoudi et al. Estimating Actuator Fault Through the Utilization of a Proportional Integral Observer with Quadratic Lyapunov Functions
10h40-11h05: <u>Cheikh Kherici,</u> Malika Kandouci, Amel Bechikh and Aicha Benhamidi Impact of PON network range and laser power on GPON and XGSPON coexistence system.	**10h40-11h05:** <u>Lotfi Madaoui,</u> Malika Kedir-Talha and Oussama Kerdjidj An FPGA-Based Embedded System for Terrain Recognition Using Inertial Measurement Units
11h05-11h30: <u>Amina Djir,</u> Fatiha Meskine and Mohamed Larbi Tayebi. Understanding the Influence of Fog Scattering Attenuation Models on IM/DD FSO Link: Image Transmission Assessment.	**11h05-11h30:** <u>Nedjoua Refis,</u> Omar Chaab, Malika Mimi and Abdelkrim Benaiche. Quality assessment of autofocusing criteria on noisy holograms in off-axis digital holography
11h30-11h55: <u>Dalil Beknadj,</u> Hakim Tayakout, Mohamed Tounsi et al. Digital Modulation Identification in Spatial Modulation MIMO Systems.	**11h30-11h55:** <u>Said Bedda,</u> Okba Kraa, Djallal Eddine Zabia, Ilyes Tegani et al. Optimization of Passivity-Based Controller for a Hybrid Vehicle Power Source using the Gray Wolf Algorithm.
11h55-12h20: <u>Khaled Telli</u>, Okba Kraa, Yassine Himeur et al. Drone-Enabled Connectivity: Advancements and Challenges in B5G / 6G Networks	**11h55-12h20:** <u>Yassine Bouafia</u> and Larbi Guezouli Real-Time Pedestrian Detection in Hazy Weather for Surveillance Systems
12h20-12h45: <u>Khalissa Charik,</u> Lebbal Mohamed Redha and Fateh Larioui Proposed a novel design of all optical AND/NAND logic gatesusing the nonlinear Kerr effect	**12h20-12h45:** <u>Dhiya Eddine Rabia Oulahcine,</u> Nacerredine Lassami, Mustapha Benssalah et al. Diagonal Unloading Algorithm for Mini-Drone Localization Using Circular Microphone Array

12h45-14h00

Lunch Break

--------------------------- **Sunday, April 21st** ---------------------------

14h00-14h45

Plenary conference II
Chairs : Pr. Zine-Eddine Baarir – Pr. Mustapha Merah

Professor Amir Nakib, Ph.D

Laboratoire LISSI, University Paris Est Créteil, Paris-France

Inference acceleration in deep learning for computer vision applications

Posters exhibit
14h45 - 15h45
Session Posters I

<u>*Chair*</u>: **Pr. Abdelmalik Taleb-Ahmed**

PI.1: <u>**Riadh Meghatria, Safaa Ferrah and Hadjer Belhenniche,**</u> Harnessing Social Media for Early Natural Disaster Detection.
PI.2: <u>**Yassine Belhadi,**</u> **Okba Kraa, Khaled Telli et al,** Sizing of fuel cell/supercapacitor hybrid system based on driving cycles and required power.
PI.3: <u>**Aissaoui Azeddine,**</u> **Aloui Imene, Boudibi Samir et al,** Deep Learning Approaches for Plant Diseases Identification and Classification: A Comprehensive Revie
PI.4: <u>**Amira Hamidi,**</u> **Boualem Mekimah, Souad Berhab et al,** A High Gain Circularly Polarized Passive RFID Tag on a Metallic Reflector for UHF Band applicatio
PI.5: <u>**Oulhissane Lynda,**</u> **Merah Mostefa, Simona Moldovanu et al,** Detection of Detonators in Baggage Using Deep CNN Architecture: A Comparative Study of Contrast Enhancement and Feature Extraction Methods

PI.6: <u>Amel Benabdallah</u>, Lyna Henaa Hasnaoui and Abdelghani Djebbari, Robust Biometric Statistical Features within Continuous Blood Pressure Signals
PI.7: Annou Abderrahim Annou, Souad Berhab, Houria Mihad Benderradji et al., Novel ENG, MNG, and DNG Metamaterial Unit Cells for S and C Communications.
PI.8: <u>Mohamed Lakhdar Tiar</u>, Nadjiba Terki and Juan Jose Dominguez Jimenez, Pneumonia Classification using deep learning: a comparative study
PI.9: <u>Fatiha Louakhche</u>, Ahcene Abed, Redha Bendoumia et al, SIW structure optimization for 5G waveguide design
PI.10: <u>Saoussen Djeddi</u>, Tarek Bentahar, Atef Bentahar et al, A Comparative Analysis of Branch-Cut and Quality-Guided Algorithms For inSAR Interferogram
PI.11: <u>Yaaqoub Kahlessenane</u> and Fatiha Bouaziz, QRS Complex Detection Algorithm based on the Empirical Mode Decomposition Method and the Hilbert's Enhanced Approximate Envelope
PI.12: <u>Nabila Zergoug</u>, Maroua Allaoui, Wassila Dib and Oussama Kerdjidj, Identifying High-Risk Patients for Diabetes using Machine Learning
PI.13: <u>Bentrad Moutaz Ballah</u>, Ghoggal Adel, Bahi Tahar et al, Fault detection of induction machine using artificial neural networks
PI.14: <u>Meskine Fatiha</u> and Oussama Mezouar, Automatic Feature Points Based Registration Technique of Satellite Images
PI.15: Fadi Abd Eladhim Zidi and Abdelkrim Ouafi, Hyperspectral imaging using deep learning in wheat crops: (Review)
PI.16: Zahia Benamara, Soraya Zehani and Athmane Zitouni, The Effect of Fully Connected Layers in Different CNN Architectures for Lung Cancer Analysis
PI.17: <u>Aicha Merabet</u>, Abdelkrim Ouafi and Abdelmalik Ouamane, Robust Person Re Identification by using fusion features and metric learning.
PI.18: <u>Hiba Ines Bitat</u>, Fouzia Maamri, Fatima Khelfaoui, Hanane Djellab, Yacine Messai and Feriel Aouissi, Optimization of a MIMO Antenna using the API metaheuristic algorithm
PI.19: <u>Sofiane Ben Abdi</u>, Abderrazak Debilou, Aicha Guergazi et al, Speed control of BLDC Quadrotor motor using ANN based on data PID-PSO
PI.20: <u>Ismail Hadj</u> Ahmed and Abdelghani Djebbari, Investigating Sympathovagal Balance in Men and Women through Time–Frequency Analysis

of HRV Signals.

PI.21: <u>Kenza Benabderrahmane</u>, Fatma Chaibeddra, Amina Serir et al, Investigation of the Relevance of Parameters Influencing DL User Throughput
PI.22: <u>Khalida Mimoune</u>, State Estimation for Nonlinear System Using Line Integral Lyapunov Function: A Polytopic Approach With Unmeasurable Premises
PI.23: <u>Amar Hichem</u>, Babes Badreddine, Hamouda Noureddine et al, Biometric Hand Recognition by Application of Particle Swarm Optimization Method
PI.24: <u>Oumaima Gharsa</u>, Mostefa Mohamed Touba, Mohamed Boumehraz et al, Autonomous landing system for A Quadrotor using a vision-based approach.
PI.25: <u>Leila Hellal</u>, Score Level Fusion Based on T-Norms Algorithm
PI.26: <u>Salah Okba</u>, Ramzi Saadi, Momamed Yacine Hammoudi et al, Enhancing the Potential of PEMFC EVs with Cutting-Edge FOPI Control based PDO Algorithme for a Three-Phase Interleaved Boost Converter
PI.27: <u>Hasna Yazid</u> and Said Gaci, Integrating hybrid weak learners for lithofacies classification using well log data
PI.28: <u>Wail Hamdi</u>, Mohamed Yacine Hammoudi, Achour Betka et al, Energy optimization of induction motor in transient state under field oriented control.
PI.29: <u>Aicha Mehidi</u>, Malika Mimi, Abdallah Mehidi et al, Contrast Enhancement and ROI detection in satellite images Application to the environment and sustainable development
PI.30: <u>Yasmine Benchaib</u>, Zineb Aziza Elaouabar, Mohammed El Amine Lazouni et al, Diabetic Retinopathy detection using modified U-Net architecture and artificial metaplasticity algorithm

15h45-18h40
Session Oral

Session: Image Processing - *Room I* *Chairs*: Pr Zitouni Athmane and Dr Aïcha Mehidi	Session: Artificial Intelligence - *Room II* *Chairs*: Pr Ouamane Abdelmalik Pr Amir Nakib
15h45-16h10: <u>Brahim Remmouche,</u> Mokhtar Taffar and Doulkifli Boukraa OPA Module built into Yolo for Occlusion	**15h45-16h10:** <u>Kahina Amara</u>, Nadia Zenati, Oussama Kerdjidj et al. Augmented Reality localisation using 6 DoF phantom head Pose Estimation-based generalisable Deep Learning model.
16h35-17h00: <u>Metales Aicha</u> and Ait Elhadj Amina Image and Signal Processing: Techniques and Applications A Theoretical Approach	**16h10-16h35:** <u>Roumaissa Bekiri,</u> Sarra Babahenini and Mohamed Chaouki Babahenini Transfer Learning for Improved Hand Gesture Recognition with Neural Networks.
16h35-17h00: <u>Meryem Ketfi,</u> Mebarka Belahcene and Salah Bourennane Automated Detection and Segmentation of Breast Cancer in Ultrasound Images with Deep Learning.	**16h35-17h00:** <u>Djenaihi Elhani,</u> Ahmed Chaouki Megherbi, Athmane Zitouni et al. Hybrid optimization method for Deep Neural Network architectures.
17h00-17h25: <u>Hayet Saadi</u> and Ali M Abdulshahed Reinforcement Learning Applications in Medical Imaging	**17h00-17h25:** <u>Meadi Mohamed Nadjib,</u> Abd El Mouméne Zerari and Hadjer Benbrahim Cervical spine fracture detection using deep learning algorithm
17h25-17h50: <u>Asma Saibi</u> and Yassmine Guerbai Fire Incendie Detection : A compartive study of Convolutional Neural Networks (CNN) and Support Vector Machines (SVM).	**17h25-17h50:** <u>Mohamed Amine Guerroudji,</u> Kahina Amara and Nadia Zenati Advancing Brain Tumor Detection: A Cutting-Edge Machine Learning Approach Leveraging CAD Systems
17h50-18h15: <u>Abdelhafidh Kacher,</u> Medjeded Merati and Saïd Mahmoudi Classification of Multi-view mammogram images using a parallel pre-trained models system.	**17h50-18h15:** <u>Ahmed Chaouki Chami,</u> Riadh Ajgou and Abdelmalik Taleb-Ahmed Facial Age Estimation Based On Transformers
18h15-18h40: <u>Ahmed Omrane Meddas,</u> Dalel Jabri and Djamel Eddine Chouaib Belkhiat A Short Review on Convolutional Neural Networks-Based Histopathological Breast Cancer Classification	**18h15-18h40:** <u>Assia Yakoub</u>, Djamel Gaceb, Fayçal Touazi et al Progressive Deep Transfer Learning for Accurate Glaucoma Detection in Medical Imaging

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15h45-18h40
Session Oral

Session: Telecommunications - Room III	Session: Robotic - Room IV
Chairs: Pr Tayeb A. Denidni and Pr. Ajgou Riadh	**Chairs: Pr Boumahrez Mohamed Dr Mawloud Mosbah**
15h45-16h10 : Mohammed Amine Benbouzid, Hesham Sadat, Nabil Belghachem et al. PD-NOMA Technique for Out-Door FSO-OCDMA Under Various Atmospheric Conditions	**15h45-16h10 : Zakaria Mehal,** Yasser Bouzid, Mohammed Guiatni et al. Optimal Target Interception using Foldable Quadrotor with Rotating Arms
16h10-16h35: Fethi Benikhlef and Nesraddinne Boukli-Hacene Mutual Coupling Reduction in Patch Antenna Arrays by Using EBG Structures	**16h10-16h35: Fadi Abd Eladhim Zidi** and Okba Benelmir Land drone system.
16h35-17h00: Imene Charabi, M'Hamed Abidine and Belkacem Fergani. Sensor-Based Human Activity Recognition Using a Hybrid CNN-SVM Approach.	**16h35-17h00: Amal Bouatrous,** Nadia Zenati, Abdelkrim Meziane et al**.** An interactive virtual reality system based on leap motion controller for hand motor rehabilitation
17h00-17h25: Kourdi Zakarya, Irid Sidi Mohammed Hadj, Chaima Boukharis et al, Array Patch Antenna in Ka Band Internet Satellite Application	**17h00-17h25: Zoulikha Bouhamatou** and Foudil Abdessemed A Finitetime Synergetic Control for Car like Mobile Robot.
17h25-17h50: Souad Chabbi, Khadidja Belhi and M'Hamed Hamadouche, New Weighted Cell Averaging CFAR detector for Gaussian environment	**17h25-17h50: Ali Zakaria Messaoui,** Omar Mechali, Iheb Edine Smaali et al. RBFNN-Based Optimized PID Control for a 3-DOF Helicopter System: Design and Validation
17h50-18h15: *Samia Gamouh and Soraya Gouder* *Analysis and Study of Photonic Crystal Fiber Using Different Structures*	**17h50-18h15: Raouf Sebbah** and Fatma Zohra Chelali IWBC and LFD for Static and Dynamic Hand Gesture Recognition.
18h15-18h40: Mohamed Benaissa, Abdelhalim Chaabane, Djelloul Aissaoui and Hussein Attia Efficient Ultra-Compact *Antenna for 2.45 GHz ISM Band Wireless Connectivity in Biomedical Devices*	**18h15-18h40: Faycal Ykhlef,** Ouahiba Cherir, Amal Mekdour et al Efficient parking lot management system for parking attendants based on real-time impulsive sound detection and voice command

Monday, April 22nd

08:00-08:30 : **Registration**

08:30-09:15 : **Plenary conference III**

Chairs : Benakcha Abdelhamid,   Khireddine Abdelkrim

Professor Tayeb A. Denidni

National Institute of Scientific Research INRS · Energy, Materials and Telecommunications Research Centre, Québec - Canada

Advanced Beamforming Antennas for Future Wireless Communication Systems

09:15-09:45

Coffee Break

Monday, April 22nd

09h50-12h45 : Oral Session

Session: Image Processing - Room I	Session: Telecommunications - Room II
Chairs: Pr Taibi Mahmoud and Dr Merzak Ferroukhi	**Chairs: Pr Khireddine Abdelkrim Dr Salim Abdessalem**
09h50-10h15: Dalia Manel Akkouchi, Ibtissem Lechelache, Yasmine Sekkour et al TL-PNN: a New Two-stream Lightweight Framework for Pansharpening based on Convolutional Neural Networks.	**09h50-10h15: Amar Tou**, Samia Driz, Benattou Fassi et al. Impact of RZ-DQPSK Modulation Generation Method on FSO Link Performance in Turbulent Environments.
10h15-10h40: Yacine Belhocine, Abdallah Meraoumia, Hakim Bendjenna et al. Biometric based Copyright Verification in the Era of Digital Piracy : A Promising Solution	**10h15-10h40: Mohamed Kamel Benbraika**, Okba Kraa, Khaled Telli et al. Mobile Edge Computing Discovery for Device-to-Device Communication in 5G
10h40-11h05: Wahiba Menasri, Abderkader Morsli, Abderrezak Gacemi et al. Software and Hardware Implementation of Regular Mode CABAC Decoder in VVC Standard.	**10h40-11h05: Belkhir Mohamed**, Mehdi Rouissat, Pascal Lorenz et al. An In-Depth Analysis of Application Protocols Performances in Various IoT Network environments.
11h05-11h30: Ouiza Nait Belaid, Malik Loudini and Amir Nakib Brain tumor classification using DenseNet and U-net convolutional neural networks.	**11h05-11h30: Djihane Maadoud**, Abdelkrim Hamza and Mohamed Becherif. Exploring the potential of Non Terrestrial Networks in next generation Intelligent Transport Systems.
11h30-11h55: Ilyes Benaissa, Athmane Zitouni and Salim Sbaa, Using Multiclass Semantic Segmentation for Close Boundaries and Overlapping Blood Cells	**11h30-11h55: Abdelmalik Mekaoussi** and Mohammed Titaouine Trapezoidal Antenna Study With MEMS Switches.
11h55-12h20: Amel Belbel, Amara Bekhouch and Noureddine Doghmane Impact of Intra-Refresh on Error Resilience and Compression Efficiency in MV-HEVC.	**11h55-12h20: Ahcene Abed**, Aissa Amrouche, Kraimia Hind et al. SIW-based Network Antenna Design and Analysis.
12h20-12h45: Mohamed El-Mehdi Imam, Lila Meddeber, Belaid Mohammed Belaid et al A Comparative Analysis of Road Extraction from Satellite Images using D-LinkNet34	**12h20-12h45: Messaoud Babaghayou,** Noureddine Chaib, Leandros Maglaras et al. Distance-Only Task Orchestration Algorithm for Energy Efficiency in Satellite-Based Mist Computing

Monday, April 22nd
09h50-12h45 : Oral Session

Session: Biomedical Engineering - Room III Chairs: Pr Benabdellah Yagoubi and Pr Ouahabi Abdeljalil	Session: Artificial Intelligence - *Room IV* *Chairs*: Pr Babahenini Ahmed Chaouki and Pr Yacine Yaddaden
09h50-10h15: Arezki Larbi, Abed Mansour, Ahmed Nahi et al. Neonatal seizure detection from minimized EEG channels using polynomial compact support distribution and VGG19-BiLSTM hybrid model	**09h50-10h15: Khedija Mekhilef,** Fayçal Abbas and Mounir Hemam Enhanced Defect Classification with CNNs and Path Aggregation Networks.
10h15-10h40: Hyem Saadi and Merzak Ferroukhi Low Noise Biopotential Amplifier and the Future Use of Energy Scavengers for Biomedical Instrumentation	**10h15-10h40: Belabbaci El Ouanas,** Khammari Mohammed, Chouchane Ammar et al. Enhancing Kinship Verification through Multiscale Retinex and Combined Deep-Shallow features
10h40-11h05: Saida Sarra Boudouh and Mustapha Bouakkaz Breast Micro-Calcification Classification: Xception and DenseNet201 Feature Fusion in Mammography.	**10h40-11h05: Nadia Azri,** Sadek Labib Terrissa, Fadila Madaci et al. Enhancing Breast Cancer Classification Using Ensemble Techniques and Feature Selection Algorithms
11h05-11h30: Khadidja Fellah Arbi, Faycal Saffih, Sofiane Soulimane et al. Constrained Linear Model Predictive Control for an Artificial Pancreas	**11h05-11h30: Riadh Meghatria,** Hadjer Belhenniche and Safaa Ferrah Rumors detection on X using pretrained language models
11h30-11h55: Ayoub Bouzara and Adel Kermi Automated Brain Tumor Segmentation in Multimodal MRI Scans Using a Multi-Encoder U-Net Model.	**11h30-11h55: Lotfi Madaoui,** Malika Kedir-Talha and Oussama Kerdjid. A CNN-based Method for Human Activity Recognition Using Inertial Measurement Units
11h55-12h20: Mohamed Rebiai, Mohamed Rafik Aymene Berkani et al Mathematical Morphology-Based Envelope Detection for Cardiac Disease Classification from Phonocardiogram Signals.	**11h55-12h20: Abir Belaala,** Labib Sadek Terrissa, Zeina Al Masry et al. Towards improved skin lesions classification using automatic hyperparameters selection and transfer learning.
12h20-12h45: Amal Bouatrous, Abdelkrim Meziane, Nadia Zenati et al. Semi-immersive virtual reality system to enhance hand motor rehabilitation after stroke.	**12h20-12h45: Salima Attache,** Mohamed Sayah, Labib Sadek Terrissa et al. Accurate Recurrent Neural Network for Active Earth Pressure Coefficient Estimation.

12:45-14:00 Lunch Break

Monday, April 22nd

14:00-14:45 : **Plenary conference IV**

Chairs : *Pr Merah Mustapha and Dr Mansour Abed*

Prof. Dr. Nizamettin AYDIN

Istanbul Technical University, Faculty of Computer and Informatics, ITU Ayazaga Campus, 34469, Maslak, Istanbul, Turkiye

Assessment of Male Dependent Infertility – An Application of Image Processing, Computer Vision, and Artificial Intelligence

Posters exhibit
14h45 - 15h45
Session Posters II

<u>Chair</u>: Pr. Abdelmalik Taleb Ahmed

PII.1: <u>Brahami Menaouer</u> and Sabri Mohammed, Blood Products Transfusion Prediction using Multi-label Classification Methods
PII.2: <u>**Taha Lemdjed Belahcene**</u>**, Okba Kraa, Hamza Afghoul et al,** Maximum power point tracking based on metaheuristic algorithms of Partially Shaded solar photovoltaic system
PII.3:<u>**Fatan Bougheziou, Omar Chaab, Malika Mimi et al**</u>, Extended depth-of-Field of vision with the acquisition of two holograms of orthogonal views with two synchronized cameras
PII.4: <u>**Riadh Meghatria**</u> **and Imène Ait Abderrahim,** Detection and Recognition Approaches for Medical Labels in Algeria
PII.5: <u>**Zoulikha Bebboukha**</u> **and Athmane Zitouni,** A New hybrid deep learning coder for Alzheimer classification
PII.6: <u>Nor Elhouda Hasrouri</u> and Ibtissem Bennnara, Visual Cryptography.
PII.7: <u>**Abdelmadjid Youcefa, Oussama Aiadi, Belal Khaldi et al**</u>, Semantic clustering of images using semantic similarity measures: A comparative study
PII.8: <u>**Aissa Boudjella, Manal Yasmine Boudjella and Chuang Liu,**</u> Heating Energy Performance Assessment using KNN Classification method: Investigating Test Size, Neighbor Parameter, and Class Count Effects
PII.9: <u>**Kebaili Rima, Driz Samia and Fassi Benattou**</u>, Supervised Machine Learning Method based Modulation Formats Classification for WDM Systems
PII.10: <u>**Alqudami Dheya Alhaq Ahmed Hamood Abdullah,**</u> Redadaa Salah, Ikni Samir et al., Low Complexity PAPR Reduction Scheme for

UFMC system

PII.11:<u>**Fatma Khenaifer, Ilyes Benaissa, Athmane Zitouni et al,**</u> Assessing the Performance of U-Net in Three Dimensional Medical Image Segmentation

PII.12: <u>**Adama Coulibaly,**</u> **Ibrahima Ngom and Jean Marie Dembele**, Remote sensing of artisanal mines buried in the ground by infrared thermography using UAV

PII.13: <u>**Benelmir Okba**</u> **and Dhiabi Fathi,** Crack Image Classification: Performance Comparison Among Different Machine Learning Algorithms

PII.14: <u>**Moussa Touhami,**</u> **Abdelmalik Ouamane and Ammar Chouchane,** A Guide to Cost-Effective Collection of Colloquial Algerian Arabic Speech Data

PII.15: **Lynda Fedlaoui, Ahmed Benallal and Mountassar Maamoun,** A Proportionate Fast NLMS with Competent Individual Activation Factors

PII.16: **Karim Benenamara, Riad Saidi, Tarek Bentahar et al,** Analysis of the Quality of Insar Images Encrypted by the Feistel Network-Based Cryptosystem Using the CFB mode.

PII.17: <u>**Mohammed Bendaoud,**</u> **Samir Kameche and Achour Ouslimani**, Analysis of the dynamics and synchronization of a Novel 1-11 GHz Chaotic Oscillator

PII.18: <u>**Bouthina Rechachi,**</u> **Khaled Rezeg and Okba Kazar,** Palm tree diseases detection using deep learning : a short review

PII.19: <u>**Sarra Ouamri**</u>, Mansour Abed and Abdelaziz Ould Ali

ALS Disease Detection in EMG using a Polynomial Compact Support Kernel-based Time-Frequency Distribution and CNN

PII.20:<u>**Aicha Mehidi, Khadidja Berradja, Malika Mimi et al**</u>, Machine learning for detection and classification of different tumors in mammograms

15h45-17h50
Session Oral

Session: Image Processing - Room I Chairs: Pr Djamel Samai and Dr Soraya Zehani	Session: Signal Processing - Room II Chairs: Pr. Ouahabi Abdeldjalil and Pr Ahmed Chaouki Megherbi
15h45-16h10: <u>Sara Atek,</u> Imane Mehidi, Imane Khadidja Abbas et al. U-Net Based Retinal Vessel Detection on DRIVE and CHASE_DB1 Databases: The Impact of Data Augmentation	**15h45-16h10: <u>Elbahdja Ourfella</u>, Mohamed Fouad Hassani and Sabra Benkrinah**, Enhancement of GPS signals acquisition in an inhomogeneous environment using the CFAR techniques
16h10-16h35: <u>Dounia Kawther Dihya Bourzig,</u> Mansour Abed and Mostefa Merah Black rot diseases' classification of apples and grapes using convolutional neural network and transfer learning	**16h10-16h35: <u>Mohamed Yacine Bensouda</u>** and Ahmed Benallal Improved Fast NLMS algorithm based on variable forgetting factor technique
16h50-17h15: <u>Lynda Chaouchi,</u> Djamel Gaceb, Fayçal Touazi and Djouher Djani Application of Deep Transfer Learning in Medical Imaging for Thyroid Lesion Diagnostic Assistance	**16h35-17h00: <u>Fatima Bennia,</u>** Siham Moussaoui, Mohammed Chaker et al. Comparative study between EMD, EEMD, and CEEMDAN based on De-Noising Bioelectric Signals.
17h00-17h25: <u>Rokia Chettouh,</u> Abdelfatih Bengana and Ismail Boukli Hacene Hybrid Machine Learning Application in Alzheimer's Disease Diagnosis through Magnetic Resonance Images.	**17h00-17h25: <u>Ferdi Ahmed Yassine</u>** and Ghazli Abdelkader EEG-based Biometric Authentication Using Machine and Deep Learning Approachs: A Review
17h25-17h50: <u>Imene Bourafa,</u> Mokhtar Taffar and Mohamed Nadjib Zennir *Efficient Region Proposals Generation for Object Detection.*	**17h25-17h50: <u>Neili Zakaria</u>** and Kenneth Sundaraj Addressing Varying Lengths in PCG Signal Classification with BiLSTM Model and MFCC Features

- *15h45-18h10* -
Session Oral

Session: Applications - *Room III* ***Chairs*: Pr Khier Benmahammed and Pr Toumi Abida**	**Session: Artificial Intelligence - *Room IV*** **Chairs: Pr Maarouf Korichi and Pr Yacine Yaddaden**
15h45-16h10: <u>Gherbia Amel</u> and Zehani Soraya Enhancing Security and Privacy Measures in Internet of Things (IoT) Implementations	**15h45-16h10: <u>Chahrazed Rahmani</u>, Azeddine Benlamoudi, Salah Eddine Bekhouche et al.** Driver Drowsiness Detection Using Swin Transformer model
16h25-16h50: <u>Hicham Madjidi</u>, Toufik Laroussi and Nedjma Detouche CFAR Detection of ships based on Median Absolute Deviation for SAR imagery in a Heterogeneous Weibull Sea Clutter.	**16h10-16h35: <u>Faiza Bella</u>, Ali Berrichi and Abdelouahab Moussaoui** Vision Transformer Model for Classification of Gastrointestinal Tract Diseases from WCE Images
16h50-17h15: <u>Badis Bacha</u>, Hatem Ghodbane, Habiba Dahmani et al. Forecast analysis of hybrid renewable energies using deep learning: A case study with data from the Capricorn FLX 202004 weather station in Biskra, Algeria	**16h35-17h00: <u>Akram Abderraouf Gharbi</u>, Ammar Chouchane, Mohcene Bessaoudi et al.** Advancing Person Re-Identification: Tensor-based Feature Fusion and Multilinear Subspace Learning
17h15-17h40: <u>Lamis Badis</u>, Wahiba Aliouat and Kenza Bouchiba Automated design of Convolutional Neural Network architecture using Gray Wolf Optimization for plant seedlings classification	**17h00-17h25: <u>Dorra Lamouchi</u>, Yacine Yaddaden and Raef Cherif** Comparative Study: Physiological-Based Driver Drowsiness Detection Using Traditional and Hybrid Machine Learning Methods
17h40-18h25: <u>Abir Betka</u>, Mounira Hendaoui, Samia Noureddine et al. Deep Learning- Based Bayoud Disease Recognition Using Palm Fronds Database From Biskra Region, Algeria	**17h25-17h50: <u>Elias Boulham</u>, Mokhtar Taffar and Mouad Bensouilah** CRNN-based Word Recognition Model for Reading Algerian Drug Labels

***17:50-18:30:* Awards and Closing of the IEEE ISPA 2024**

Chairs: Pr Abdelkarim Ouafi, Pr Abdelmalik Taleb Ahmed and Pr Malika Mimi