

ATSIP'2024 CONFERENCE TECHNICAL PROGRAM

Thursday July 11, 2024	
8:00 – 16:00 REGISTRATION OPEN	
9:30 – 10:00 ATSIP CONFERENCE OPENING CEREMONY	
10:00 – 11:00 <u>Big Room</u>	PLENARY SESSION Chairmen's: Basel SOLAIMAN & Ali KHENCHAF (ENSTA-Bretagne, FRA) "Water Resources Evolution Under the Eye of Satellites" by Mehrez ZRIBI (CESBIO, FRANCE)
11:00 – 11:30 COFFEE BREAK	

Thursday July 11, 2024: 11:30 – 13:00 <u>Room 1</u>	
Regular Session (RST-A1) REMOTE SENSING & ASSIMILATION (RSA-S1) Chairmen's: Mohamed FARAH (ISAMM, TUN) & Abdelmalik TOUMI (ENSTA, FRA)	
RSA-28	<i>Computational methods to retrieve soil moisture using remote sensing data: A review</i> Raja Inoubli, Daniel Enrique Constantino-Recillas, Alejandro Monsivais-Huertero, Lilia Bennaceur Farah and Imed Riadh Farah
RSA-51	<i>Comparative performances of CNN models for SAR Targets classification</i> Abdelmalek Toumi, Jean-Christophe Cexus and Ali Khenchaf
RSA-58	<i>Comparison between high and coarse spatial resolution surface soil moisture products over two Mediterranean sites in Tunisia and France</i> Emna Ayari, Nicolas Baghdadi, Nemesio J. Rodríguez-Fernández, Clement Albergel, Pietro Stradiotti, Zohra Lili-Chabaane and Mehrez Zribi
RSA-100	<i>Unsupervised Multiclass Change Detection and Mapping Using Deep Neural Network</i> Radja Kheddami and Ahmed Tahraoui
RSA-138	<i>LULC Change Detection Using Combined Machine and Deep Learning Classifiers</i> Radja Kheddami and Ahmed Tahraoui
RSA-71 ONLINE	<i>Combined Deep learning architectures using Fusion Rules for Target Recognition in SAR images</i> Khairreddine Cheikh, Narimen Mimoun, Redha Aitahcene and Abdelmalek Toumi
Thursday July 11, 2024: 11:30 – 13:00 <u>Room 2</u>	
Regular Session (RST-A2) MEDICAL SIGNAL/IMAGE & COMPUTER AIDED DIAGNOSIS (MIA-S1) Chairmen's: Lamia SELLAMI (ISBS, ATMS, TUN) & Mounir SAYADI (ENSIT, TUN)	
MIA-36	<i>CNL-ResUnet : A novel deep learning architecture for stroke image segmentation</i> Nesrine Jazzar, Besma Mabrouk and Ali Douik
MIA-62	<i>Cardiovascular Disease Prediction using Relief-SVM Approach</i>

	<i>Hayfa Moulehi, Ahmed Fnaiech, Hanene Sahli and Mounir Sayadi</i>
MIA-64	<i>Pre-trained deep learning models for brain tumor classification using MRI images</i> Ameni Yazzeoui and Afef Elloumi Oueslati
MIA-69	<i>Deep Characterization for Sperm Analysis: Leveraging a Novel Dataset to Enhance Motility Assessments</i> Idir Tiab, Nabil Hafsi, Ahror Belaid, Saïd Yahiaoui, Djamel Belazzougui and Mokrane Iguer-Ouada
MIA-141	<i>Enhanced Deep Learning Framework for Automatic MRI Brain Tumor Segmentation with Data Augmentation</i> Ekram Chamseddine, Lotfi Tlig and Mounir Sayadi
MIA-113 ONLINE	<i>A Comparative Study of Derivative-Based and Wavelet-Based Approaches for Epilepsy EEG Analysis</i> Zayneb Brari, Ines Bouzouita and Safya Belghith
Thursday July 11, 2024: 11:30 – 13:00 <u>Room 3</u>	
Regular Session (RST-A3) IMAGE, VIDEO, SPEECH & AUDIO PROCESSING (IVP-S1) Chairmen's: Ali DOUIK (ENISO, TUN) & Hassene SEDDIK (ENSIT, TUN)	
IVP-29	<i>High-Level Synthesis Implementation of SAD for VVC Standard</i> Bouthaina Abdallah, Fatma Belghith and Nouri Masmoudi
IVP-77	<i>Video texture analysis for VVC content</i> Fatma Belghith, Taheni Damak, Sonda Ben Jdidia, Bouthaina Abdallah, Mohamed Ali Ben Ayed and Nouri Masmoudi
IVP-54	<i>A Deep GRU-BiLSTM Network for Multi-modal Emotion Recognition from Text</i> Ibtissem Yacoubi, Radhia Ferjaoui and Anouar Ben Khalifa
IVP-97	<i>A Novel Bi-GRU/Bi-LSTM Model for ear recognition in degraded conditions</i> Sana Boujnah, Radhia Ferjaoui and Anouar Ben Khalifa
IVP-129	<i>Efficient Algorithm for Scalable High Efficiency Video Coding Intra Prediction process</i> Amina Kessentini, Ibtissem Wali, Taheni Damak and Nouri Masmoudi
IVP-111	<i>Deep Learning for age Estimation</i> Donia Ammous, Fahmi Kammoun, Nouri Masmoudi
13:00 – 15:00 LUNCH & BREAK	
Thursday July 11, 2024: 15:00 – 16:30 <u>Room 1</u>	
Special Session (SST-B1) AI IN NEURODEGENERATIVE DISEASES: ADVANCES AND PROSPECTS Chairmen's: Nawres KHLIFA (ISTMT, TUN) & Basel SOLAIMAN (IMT, FRA)	
SS1-55	<i>Neurological Disorder Diagnosis through Deep Residual Network-based EEG Signal Analysis</i> Ajifa Jridi, Ridha Djemal and Kais Belwafi
SS1-151	<i>Utilizing Linguistic and Acoustic features from Arabic Transcripts for Early Detecting Alzheimer's Disease Using Different Machine Learning Algorithms</i> Hanein Omar, Abdullah Elmangoush, Ayyah Fadhl and Malak Ali
SS1-167	<i>Improving Parkinson's Disease Identification in SPECT Imaging Using a 3D Convolutional Neural Network Enhanced by Self-Attention Mechanism</i> Hajer Khachnaoui, Nawres Khelifa and Rostom Mabrouk
SS1-185	<i>Higuchi versus Katz fractal dimensions-based features extraction method for epilepsy diagnosis using EEG signals</i> Zayneb Brari, Ines Bouzouita and Safya Belghith

SS1-47 ONLINE	<i>Early Diagnosis of Parkinson's Disease Through Speech Signals' Analysis Based on Advanced Deep Learning Techniques</i> Ayman Qahmash and Basmah Alqahtani
SS1-22 ONLINE	<i>Mental Disorder Detection using Non-Orthogonal Adaptive Constrained IVABMGMM</i> Ali Algumaei, Muhammad Azam and Nizar Bouguila
Thursday July 11, 2024: 15:00 – 16:30 <u>Room 2</u>	
Regular Session (RST-B2) MEDICAL SIGNAL/IMAGE & COMPUTER AIDED DIAGNOSIS (MIA-S2) Chairmen's: Zied LACHIRI (ENIT, TUN) & Mohamed BEN SLIMA (ENETCOM, TUN)	
MIA-136	<i>Performance analysis of Parkinson Detection Techniques</i> Donia Ammous, Yassine Ben Ayed
MIA-143	<i>Spinal Cord Cross Sectional Area normalization in MR Images: Case of healthy population</i> Tayssir Boushila, Mouna Sahnoun, Nadia Bouattour, Mariem Dammak, Chokri Mhiri and Fathi Kallel
MIA-172 ONLINE	<i>Potential of brain MRI in the diagnosis of Juvenile Myoclonic Epilepsy: An overview</i> Ibtissem Boushila, Mouna Mouna Sahnoun, Sawssan Daoud, Mariem Dammak, Chokri Mhiri and Fathi Kallel
MIA-209	<i>Deep Learning-based Methods for MS Lesion Segmentation: A Review</i> Hanene B. Abdelali, Mouna Sahnoun, Salma Sakka, Mariem Damak, Patrick Siarry & F.Kallel
MIA-4	<i>Skin Cancer Detection Based on Transfer Learning Techniques</i> Abdelkader Alrabai, Amira Echtioui and Fathi Kallel
MIA-52 ONLINE	<i>Enhancing Breast Cancer Detection through Advanced Deep Learning: An Application of YOLOv8x on Mammographic Images</i> Farag H Alhsnony and Lamia Sellami
MIA-68 ONLINE	<i>Advancing Breast Cancer Detection with Convolutional Neural Networks: A Comparative Analysis of MIAS and DDSM Datasets</i> Farag H Alhsnony and Lamia Sellami
Thursday July 11, 2024: 15:00 – 16:30 <u>Room 3</u>	
Regular Session (RST-B3) BIG DATA & CLOUD COMPUTING APPLICATIONS (BDC) Chairmen's: Naoufel KRAIEM (KKU, KSA)	
BDC-12 ONLINE	<i>An investigation of malware and the systems used to detect and identify malware</i> Fahad Mira
BDC-44 ONLINE	<i>Decentralized distribution for secure GAN using IPFS with the Hyperledger blockchain</i> Arkan M Radhi, Tarek M. Hamdani and Adel M. Alimi
BDC-94 ONLINE	<i>The Role of Virtual Reality Technology in Knowledge Acquisition: A Systematic Review</i> Musab Anwer and Ezzeddine Zagroubaa
BDC-95 ONLINE	<i>Quality Assessment of Virtual Reality Software Applications</i> Musab Anwer and Ezzeddine Zagroubaa
BDC-195 ONLINE	<i>Exploring Task Offloading in Mobile Edge Computing Environments: An In-Depth Review and Prospective Analysis</i> Mohammad Ashique E Rasool, Anoop Kumar, Asharul Islam & Mohammad Nadeem Ahmed
BDC-196 ONLINE	<i>A Cloud-Based Offloading Process for MCommerce Application's Performance in Cloud Environment</i> Sadaf Yasmin, Asharul Islam, Swati Mishra and Rashid Hussain
BDC-197 ONLINE	<i>A Mobile Cloud Architecture for M-Commerce Business Application's Execution Performance</i> Sadaf Yasmin, Asharul Islam, Swati Mishra and Rashid Hussain

Friday July 12, 2024	
8:00 – 16:00 REGISTRATION OPEN	
9:00 – 10:00 <u>Big Room</u>	PLENARY SESSION Chairmen's: Ahmed BEN HAMIDA (KKU, KSA) & Abdelmalik TOUMI (ENSTA Bretagne , FRANCE) "Adventures in Deep Learning-Assisted Multimodality Medical Imaging Wonderland" by Habib ZAIDI (Geneva University Hospital, SWITZERLAND)
10:00 – 10:30 BREAK	

Friday July 12, 2024: 10:30 – 12:30 <u>Room 1</u>	
Regular Session (RSF-A1) MEDICAL SIGNAL/IMAGE & COMPUTER AIDED DIAGNOSIS (MIA-S3) Chairmen's: Ahmed FAKHFAKH (CRNS, TUN) & Ali KHENCHAF (IMT, FRA)	
MIA-21	<i>An efficient Blood pressure estimation algorithm based on machine learning using a mixture of non-contact hand-face PPG signals features</i> Zouhair Mbarki, Yessine Amri, Amine Ben Slama, Hedi Trabelsi and Hassene Seddik
MIA-98	<i>Semantic Segmentation of Myeloid Cells on Blood Smears</i> Leila Ryma Lazouni, Mourtada Benazzouz, Fethallah Hadjila & Mohammed El Amine Lazouni
MIA-182	<i>Comparative Analysis of Non-Stationary Signal Processing Approaches for Epileptic Disease Detection</i> Badreddine Mandhouj, Mohamed-Ali Cherni, Mounir Sayadi and Basel Solaiman
MIA-199	<i>The ideal PGGAN for the 3D medical data Segmenting</i> Nabila Elloumi and Hassene Seddik
MIA-4	<i>Skin Cancer Detection Based on Transfer Learning Techniques</i> Abdelkader Alrabai, Amira Ehtioui and Fathi Kallel
MIA-8 ONLINE	<i>Transfer Learning Models for MRI-Based Brain Tumor Detection</i> Moriba Berete, Amira Ehtioui, Lamia Sellami and Ahmed Ben Hamida
MIA-60 ONLINE	<i>Deep Learning for Diabetic Retinopathy Early Detection and Severity Grading</i> Dhia Elhak Bouslimi, Yahia Bouslimi and Afef Kacem Echi
MIA-165 ONLINE	<i>BI-RADS findings extraction from Breast Ultrasound Reports based on Deep Learning Approaches</i> Ahmed Sahl and Shafaatunnur Hasan
Friday July 12, 2024: 10:30 – 12:30 <u>Room 2</u>	
Regular Session (RSF-A2) AI FOR ADVANCED TECHNOLOGIES (AAT-S1) Chairmen's: Hassene SEDDIK (ENSIT, TUN), Taheni DAMMAK (ENETCOM, TUN)	
AAT-59	<i>Simulation of Chemical Engineering Memristive Biosensor</i> Manel Bouzouita, Fakhreddine Zayer and Hamdi Belgacem

AAT-79	<i>Plant Leaf Disease Detection Using Transfer learning</i> Taheni Damak, Sahar Marzougui, Mohamed Ali Ben Ayed and Nouri Masmoudi
AAT-103	<i>A Deep CNN-BiGRU model for Lymphoma and Residual Masses Recognition</i> Radhia Ferjaoui, Sana Boujnah and Anouar Ben Khalifa
AAT-137	<i>Modeling Continuous Emotions in Text Data using IEMOCAP Database</i> Awatef Messaoudi, Hayet Boughrara and Zied Lachiri
AAT-145	<i>ML-based failure detection approach for predictive maintenance in an industry 4.0 oriented web manufacturing control application</i> Sirine Smaoui and Mouna Baklouti
AAT-193 ONLINE	<i>Probabilistic ML based RUL prediction of a turbofan engine</i> Marwa Souissi, Mohamed Njah and Ridha Hamdi
AAT-154 ONLINE	<i>Exploring the Nexus of Mental Health Research and Data Synthesis: Role of Medical Data Quality in Machine Learning for Addiction Studies</i> Wafia Abada and Abdelkrim Bouramoul
AAT-171 ONLINE	<i>Toward integrating reuse approach within scrum process</i> Khaoula Sayeb, Oumaima Bhiri and Sonia Ayachi Ghannouchi
Friday July 12, 2024: 10:30 – 12:30 Room 3	
Regular Session (RST-A3) IMAGE, VIDEO, SPEECH & AUDIO PROCESSING (IVP-S2) Chairmen's: Safya BELGHITH (ENIT, TUN) & Ahror BELAID (BEJAIA U., ALG)	
IVP-128	<i>Audio signal Enhancement based on amplitude and phase deep learning model</i> Mahrez Benneila, Salah Hadji and Mouhamed Anouar Ben Messouad
IVP-150	<i>Expressivity Transfer in Transformer-Based Text to Speech Synthesis</i> Mohamed Hamed and Zied Lachiri
IVP-159	<i>Adaptive Image Steganography: A Review and Research Directions</i> Ayyah Fadhl, Hanein Omar, Malak Elsherif and Abdullah Elmangoush
IVP-61 ONLINE	<i>Driver Action Recognition in Low-Light Conditions: A Multi-View Fusion Framework</i> Karam Abdullah, Imen Jegham, Mohamed Ali Mahjoub and Anouar Ben Khalifa
IVP-76 ONLINE	<i>Gop Size Effect on VVC Encoder Performance with MRF Variation</i> Rana Jassem, Taheni Damak, Mohamed Ali Ben Ayed and Nouri Masmoudi
IVP-96 ONLINE	<i>Assessing the Efficacy of TinyML Implementations on STM32 Microcontrollers: A Performance Evaluation Study</i> Diouani Ali, El Hamdi Ridha and Njah Mohamed
IVP-124 ONLINE	<i>A Dual Approach with CycleGANs-based Face Reconstruction and ViT-based Classification</i> Laila Ouannes, Anouar Ben Khalifa and Najoua Essoukri Ben Amara
12:30 – 15:00 LUNCH & BREAK	
Friday July 12, 2024: 15:00 – 16:30 Room 1	
Regular Session (RSF-B1) REMOTE SENSING & ASSIMILATION (RSA-S2) Chairmen's: Mehrez ZRIBI (CESBIO, TUN) & Radja KHEDDAM (USTHAB, ALG)	
RSA-155	<i>TALDS: A Transfer-Active Learning-Driven Siamese Network for Bi-temporal Image Classification</i> Farah Chouikhi, Ali Ben Abbes and Imed Riadh Farah
RSA-120	<i>Illigal irrigation Mapping in Oases Using Optical and radar Time-Series Data and Machine-Learning Classifiers</i>

	<i>Zeineb Kassouk, Ferdaws Akkacha, Wafa Chebbi, Hamadi Habalieb, Atfa Saad and Zohra Lili-Chabaane</i>
RSA-176	<i>Bag-of-Visual-Words feature Extraction using Graph Convolutional Networks</i> Montassar Mastour and Mohamed Farah
RSA-204	<i>Estimating olive leaf traits from spectrometer data using PROSPECT inversion methods with variable Refractive Index</i> Mouna Ben Said and Abdelaziz Kallel
RSA-205	<i>Olive Tree Satellite Image Segmentation Based on SAM and Multi-Phase Refinement</i> Amir Jmal, Chaima Chtourou, Mahdi Louati and Abdelaziz Kallel
RSA-117 ONLINE	<i>Analysis of the effects of heatwave events on continental surfaces from multi-spectral satellite series</i> Aicha Chahbi Bellakanji, Ferdaws Ben Akacha and Mehrez Zribi
Friday July 12, 2024: 15:00 – 16:30 Room 2	
Special Session (SSF-B1) ADVANCES & CHALLENGES IN NETWORKS & COMMUNICATION (TCN-S1) Chairmen's: Mongi ZAIDI (KKU, KSA)	
TCN-19	<i>A novel hardware-based technique for wireless sensor networks balancing power consumption with error location</i> Monji Zaidi and Imen Bouazzi
TCN-20	<i>Indoor signal fuzzy modeling for wireless sensor mobility control in critical corner effect situations</i> Imen Bouazzi and Monji Zaidi
TCN-41	<i>Deep Learning Models Comparison in binary context for DDoS Attack Detection in Software-Defined Network</i> Ameur Salem Zaidoun and Zied Lachiri
TCN-14 ONLINE	<i>Consideration of Energy Efficiency into Wireless Communication Systems</i> Osama Abusaid and Muhammad Shwaiya
TCN-148 ONLINE	<i>The efficiency of using PPDIOO Methodology to Design Graduation Projects for Network Department Students</i> Abdelsalam Elrashdi, Salem Khiralla, Rami Radwan and Fatma Mohammed Hasan Mohammed
TCN-116 ONLINE	<i>Enhancing UWB Antenna Array Performance: Leveraging Taguchi Method with Pattern Intelligence</i> Ramzi Kheder, Ridha Ghayoula and Jaouhar Fattahi
TCN-187 ONLINE	<i>Maximization of Wireless Sensing Network's Throughput Communicating with Long Range (LoRa) Modulation</i> Raouia Masmoudi Ghodhbane
Friday July 12, 2024: 15:00 – 16:30 Room 3	
Regular Session (RSF-B3) ADVANCED TECHNOLOGIES FOR SECURITY (ATS-S1) Chairmen's: Mohamed ATRI (KKU, KSA) & Naoufel KRAIEM (KKU, KSA)	
ATS-24	<i>In-Memory Computing Architecture for Efficient Hardware Security</i> Hala Ajmi, Fakhreddine Zayer and Hamdi Belgacem
ATS-108	<i>An efficient hardware implementation of LED lightweight block cipher</i> Ayoub Mhaouch, Wadhah Ayadi, Sarra Ridha, Khaled Issa, Abdessalem Ben Abdelali and Mohsen Machhout
ATS-109	<i>High-Performance Hardware Implementation of LED block cipher</i>

	<i>Ayoub Mhaouch, Marwa Fradi, Wafa Gtifa, Khaled Issa, Abdessalem Ben Abdelali and Mohsen Machhout</i>
ATS-106	<i>Access control based on roles: Case study Building a secure Smart Hospital using BPMS</i> <i>Asma Daassa, Mohsen Machhout, Sonia Ayachi Ghannouchi and Taoufik Aguil</i>
ATS-132	<i>VisCrypt: Image Encryption Featuring Novel Chaotic Key Generation and Block Permutation Techniques with Visual Cryptography</i> <i>Muhammad Shahbaz Khan, Jawad Ahmad, Muhammad Ali, Ahmed Al-Dubai, Nikolaos Pitropakis and William J. Buchanan</i>
ATS-142	<i>Image Encryption Using A Novel Orbital-Extraction Permutation Technique and Chaotic Key Generation</i> <i>Sikandar Khan, Safee Ullah, Jawad Ahmad, Amjad Ullah, Arshad Arshad and Muhammad Shahbaz Khan</i>
ATS-152	<i>Credit Card Fraud Detection Using Synthetic Minority Oversampling Technique and Deep Learning Technique</i> <i>Abdullah Elmangoush, Hanein Omar, Ayyah Fadhl and Malak Alshrif</i>

Saturday July 13, 2024	
8:00 – 16:00 REGISTRATION OPEN	
8:30 – 9:30	PLENARY SESSION
Big Room	Chairmen's: Lamia SELLAMI (ISBS, TUN) & Ahmed FAKHFAKH (CRNS, TUN) "Observation Systems and Monitoring of the Environment by Aircraft (such as drones)" by Ali KHENCHAF (ENSTA Bretagne, FRANCE)
9:30 – 9:45 BREAK	

Saturday July 13, 2024: 9:45 – 10:45 Room 1	
Regular Session (RSS-A1) MEDICAL SIGNAL/IMAGE & COMPUTER AIDED DIAGNOSIS (MIA-S4) Chairmen's: Salwa SAHNOUN (ENETCOM, TUN)	
MIA-130	<i>C.elegans coding and non-coding zones classification using multifractal features and support vector machine</i> Nadia Selmi, Zeineb Chebbi Babchia and Afef Elloumi Oueslati
MIA-133	<i>Autism diagnosis with a CNN model based on genetic mutations</i> Farah Mnif, Feriel Ben Nasr and Afef Elloumi Oueslati
MIA-118	<i>Dermoscopic Images Classification Using Pretrained VGG-16 and ResNet-50 Models</i> Sirine Mejri and Afef Elloumi Oueslati
MIA-160	<i>Detection and Classification of Neurodegenerative Diseases by Automatic Speech Analysis</i> Ahlem Kehili, Lamia Bouafif and Adnen Cherif
Saturday July 13, 2024: 9:45 – 10:45 Room 2	
Regular Session (RSS-A2) IMAGE, VIDEO, SPEECH & AUDIO PROCESSING (IVP-S3) Chairmen's: Mouna SAHNOUN (ISSAT-GAFSA, TUN)	
IVP-174	<i>Decoding Emotions: Integrating EEG Signals and Facial Expressions for Advanced Multimodal Emotion Recognition</i> Khouloud Moussaoui and Mohamed Farah
IVP-31 ONLINE	<i>FPGA based Unified Architecture for H.266/VVC 1-D DCT-II Transform</i> Jubran Alshahrani and Hassen Loukil
IVP-180 ONLINE	<i>Cross-Lingual Transfert Learning for Speech Emotion Recognition</i> Imen Baklouti, Olfa Ben Ahmed, Raoudha Baklouti and Christine Fernandez
IVP-181 ONLINE	<i>Affordable Deep learning-based Leaf Disease Detection and Localization for Precision Agriculture</i> Balkis Tej, Soulef Bouafia, Olfa Ben Ahmed, Mohamed Ali Hajjaji and Abdellatif Mtibaa
Saturday July 13, 2024: 9:45 – 10:45 Room 3	
Regular Session (RSS-A3) AI FOR ADVANCED TECHNOLOGIES (AAT-S2)	

Chairmen's: Imen ZAIDI (KKU, KSA)	
AAT-184	<i>Leveraging Machine Learning for Gait Phase Classification with Varied Training Methods</i> Amal Mekni, Jyotindra Narayan and Hassène Gritli
AAT-203	<i>Comparative Study of Data Reduction Methods in Electrical Impedance Tomography For Hand Sign Recognition</i> Bilel Ghouli, Bilel Ben Atallah, Salwa Sahnoun, Ahmed Fakhfakh and Olfa Kanoun
AAT-206	<i>Exploring Model Compression Techniques for Efficient 1D CNN-Based Hand Gesture Recognition on Resource-Constrained Edge Devices</i> Mahdi Mnif, Salwa Sahnoun, Mahdi Djemaa, Ahmed Fakhfakh, Olfa Kanoun
AAT-178 ONLINE	<i>AI-Enhanced Medication Safety: Advanced Detection of Drug Interactions Using LLMs</i> Basma Alshehri, Naoufel Kraiem and Hounaida Sakly
10:45 – 11:00 BREAK	
Saturday July 13, 2024: 11:00 – 13:00 Room 1	
Special Session (SSS-A4) CHALLENGES OF AI FOR CONTROL & NAVIGATION (SSS-3)	
Chairmen's: Hassene SEDDIK (ENSIT, TUN), Adnene CHERIF (ENIT, TUN)	
SS3-9	<i>Adaptive PID gain-scheduling for 3D smart quadrotor flight controller</i> Wassim Arfa, Chiraz Ben Jabeur, Yassine Faleh and Hassene Seddik
SS3-17	<i>PID Fuzzy and Neural Fuzzy Depth Controllers for an underwater robot: the UROV</i> Chiraz Ben Jabeur and Hassene Seddik
SS3-74	<i>Security challenges in autonomous vehicles: a case study of Camera and LiDAR sensors</i> Maryem Ghliss, Lilia Kechich and Karim Chabir
SS3-135	<i>Fuzzy Logic Obstacle Avoidance Controller for a Mobile Robot using LIDAR</i> Sana Hanana, Mohamed Slim Masmoudi and Mohamed Masmoudi
SS3-179	<i>A Novel Nonlinear Intelligent MPPT Control for Optimizing Solar PV Systems in Medical Applications under Dynamic Conditions</i> Khalil Chnini, Hsen Abidi, Said Riahi and Abdelkader Mami
SS3-99 ONLINE	<i>MRAC with least squares for Aircraft attitude control motion</i> Safa M Abusaid and Ali M Elmelhi
Saturday July 13, 2024: 11:00 – 13:00 Room 2	
Regular Session (RSS-A5) IOT, EMBEDDED SYSTEMS & RF APPLICATIONS (IES-S1)	
Chairmen's: Mohamed ATRI (KKU, KSA)	
IES-53	<i>Design and development of a SIW wideband-pass filter with cross-shape slots</i> Sirine Aouine Chaieb and Sabri Beldi, Ali Gharsallah
IES-157	<i>A Slotted Patch Antenna Design for C/S Band Satellite Data Transmission</i> Neila Kammoun and Ali Gharsallah
IES-177	<i>Enhanced WiFi 6/6E Connectivity: Design of a Multiband Fractal Antenna with Circular Polarization</i> Mahdi Abdelkarim and Ali Gharsallah
IES-105 ONLINE	<i>UWB Antenna for V2V Communication Systems</i> Abdelilah Mansour, Chokri Baccouch, Wysem Fathallah, Hedi Sakli and Bassem Ben Salah
IES-161 ONLINE	<i>Fortifying Security in Smart Energy Management Systems: Optimizing Energy Efficiency</i> Mohammed Algarni, Naoufel Kraiem and Hounaida Sakly
IES-192 ONLINE	<i>Detecting and Classifying Phishing Attacks in Industrial IoT Networks Using a CNN-based Multilayer Framework with Explainable AI</i>

	<i>Sara Mohammed, Naoufel Kraiem and Hounaida Sakly</i>
IES-194 ONLINE	<i>An IOT Based Framework for Prediction of Environment Quality Using AI</i> Omar Saad Alqahtani and Pravin Ramdas Kshirsagar
IES-200 ONLINE	<i>A Blockchain-Based Deed Registration System: A Case Study for Saudi Arabia</i> Omar Saad Alqahtani, Shouq Saeed Alamri and Atef Masmoudi
Saturday July 13, 2024: 11:00 – 13:00 Room 3	
Regular Session (RSS-A6) NEW TECHNOLOGIES FOR COMMUNICATION NETWORKING (TCN-S2) Chairmen's: Mohamed GHORBEL (ENETCOM, TUN)	
TCN-16 ONLINE	<i>Channel Model Analysis for Massive MIMO Systems</i> Osama Abusaid and Mohamed Msallem
TCN-57 ONLINE	<i>MIMO Antenna Module operating in millimeter-wave spectrum, incorporating Pattern Diversity at various angles for 5G Internet-of-Things applications.</i> Chouikhi Linda, Essid Chaker, Sakli Hedi and Ben Salah Bassem
TCN-78 ONLINE	<i>Revealing the Imperceptible Network: Numerical Studies on the Impact of Electromagnetism on the Human Brain</i> Lazhar Bouali and Kassem Anis Bouali
TCN-87 ONLINE	<i>Positional Analysis of Spectrum Sharing Between IEEE 80.16 and TV Band</i> Hashim Elshafie, Norshiela Fisal and Ahmed Elmpkhtar
TCN-188 ONLINE	<i>Potential Sharing in TV Band using Cognitive Wireless Networks</i> Hashim Elshafie, Norshiela Fisal, Mosab Hamdan, Paul Rodrigues, Quadri Naveed and Shamimul Qamar
TCN-201 ONLINE	<i>Quantifying the Availability of TV White Space for Cognitive Radio in Malaysia</i> Hashim Elshafie, Hafizal Hafizal Mohamad, Mosab Hamdan, Paul Rodrigues, Quadri Naveed and Abdelmoty M. Ahmed
TCN-202 ONLINE	<i>Cognitive Architecture Based Spectrum Sharing between 4G LTE-Advanced Network and TV Band</i> Hashim Elshafie, Zubair Suleiman, Belgacem Bouallegue, Shamimul Qamar, Abdallah Elhigazi and Mosab Hamdan
13:00 – 15:00 LUNCH & BREAK	
Saturday July 13, 2024	
15:00 – 17:00 <u>Big Room</u>	PLENARY SESSION - VISIOCONFERENCE Chairmen's: Ahmed BEN HAMIDA (KKU, KSA) & Basel SOLAIMAN (ENSTA-Bretagne, FRA) "Digital brain activity and pathology in Alzheimer disease: Toward a predictive physiopathology" by Habib BENALI (PERFORM Centre, CANADA) "EEG/MEG source imaging of transient and oscillatory epileptic brain activity using the ME on the mean framework" by Christophe GROVA (PERFORM Centre, Concordia U., CANADA) "How Brain Perfusion Changes in Preclinical Alzheimer's Disease" by Laetitia JEANCOLAS (Concordia University, CANADA)

Sunday July 14, 2024	
<p>9:00 – 10:00</p> <p><u>Big Room</u></p>	<p>PLENARY SESSION</p> <p>Chairmen's: Mohamed BEN SLIMA (ENETCOM, TUN) & Fathi KALLEL (ENETCOM, TUN)</p> <p>"Application of AI in Cardiovascular Field: Present & Future" by Rania HAMMEMI (CHU-Bourguiba, TUN)</p> <p>"Advanced Technologies for Medical Signal Processing" by Ahmed BEN HAMIDA (ATMS, KKU, KSA)</p>
<p>10:00 – 10:30</p> <p>BREAK</p>	

Sunday July 14, 2024: 10:30 – 11:30	
<p><u>Room 1</u></p> <p>Regular Session (RSS-A1)</p> <p>MEDICAL SIGNAL/IMAGE & COMPUTER AIDED DIAGNOSIS (MIA-S5)</p> <p>Chairmen's: Mouna SAHNOUN (ISSATG, TUN)</p>	
<p>MIA-1</p>	<p><i>Deep Learning Approaches for Dermoscopic Image-Based Skin Cancer Diagnosis</i> Khouloud Bedoui, Hiba Mzoughi and Mohamed Ben Slima</p>
<p>MIA-32 ONLINE</p>	<p><i>Explainable AI Framework for Alzheimer's Diagnosis Using Convolutional Neural Networks</i> Dhekra Mansouri, Amira Ehtioui, Rafik Khemakhem and Ahmed Ben Hamida</p>
<p>MIA-183</p>	<p><i>Automated System Classification of ECG Heartbeat based on Support Vector Machine and Convolutional Neural Network</i> Sameher Ajili, Rym Cheour, Mariem Abid, Mohamed Abid and Richard Hotte</p>
<p>MIA-91 ONLINE</p>	<p><i>Review of MRI brain tumor segmentation and MGMT promoter classification methods on BraTs dataset based on Deep learning</i> Feriel Amor, Hiba Mzoughi, Ines Njeh and Mohamed Ben Slima</p>
<p>MIA-156 ONLINE</p>	<p><i>Geometric Deep Learning Techniques for Analyzing Brain 3D Meshes</i> Mariem Ayed, Akrem Sellami, Imed Riadh Farah and Mauro Dalla Mura</p>
Sunday July 14, 2024: 10:30 – 11:30	
<p><u>Room 2</u></p> <p>Regular Session (RSS-A2)</p> <p>IMAGE, VIDEO, SPEECH & AUDIO PROCESSING (IVP-S4)</p> <p>Chairmen's: Taheni DAMMAK (ENETCOM, TUN)</p>	
<p>IVP-65 ONLINE</p>	<p><i>Exploring Human Activity Patterns: Investigating Feature Extraction Techniques for Improved Recognition with ANN</i> Walid Ayadi, Amine Saidi and Ines Channoufi</p>
<p>IVP-163 ONLINE</p>	<p><i>Grape Leaf Disease Identification & Disease-specific Fertilizer Recommendation</i> Priyanka Pol, Vyankatesh Nyati, Kalpesh Somwanshi and Sonali Patil</p>
<p>IVP-164 ONLINE</p>	<p><i>VHDL implementation of Chaotic pseudo-random number generator for cryptographic applications</i> Rim Amdouni, Abbas Bradi and Mohamed Ali Hajjaji</p>
<p>IVP-158 ONLINE</p>	<p><i>Advanced graph deep learning for High-dimensional image analysis: challenges and opportunities</i></p>

<i>Refka Hanachi, Akrem Sellami, Imed Riadh Farah and Mauro Dalla Mura</i>	
Sunday July 14, 2024: 10:30 – 11:30 <u>Room 3</u>	
Regular Session (RSS-A3) AI FOR ADVANCED TECHNOLOGIES (AAT-S3) Chairmen's: Mohamed GHORBEL (ENETCOM, TUN)	
AAT-84 ONLINE	<i>The Analysis of Arabic Tweets Sentiment About Trending Hashtags Using Transfer Learning with Machine Learning Model</i> Waad Nasier Al-Qahtani and Anandhavalli Muniasamy
AAT-146 ONLINE	<i>Enhancing Crop Production using Artificial Intelligence in Agricultural Revolution</i> Mohammad Nadeem Ahmed, Ajay Pal Singh, Mohammad Rashid Hussain, Mohammad Ashiquee Rasool, Imran Mohammad Khan and Muhammad Shahid Dildar
AAT-153 ONLINE	<i>Artificial Intelligence in Fintech: Emerging Trends and Use Cases</i> Mohammad Nadeem Ahmed, Abhijeet Anand, Mohammad Rashid Hussain, Imran Mohd Khan, Mohammad Ashiquee Rasool and Mohammed Mohsin Ahmed
Sunday July 14, 2024	
12:00 – 13:00 <u>Big Room</u>	ATSIP CONFERENCE CLOSING CEREMONY

