

ATSIP'2020 CONFERENCE TECHNICAL PROGRAM

Wednesday September 02, 2020

09:00 – 10:00	PLENARY SESSION ROOM 1 Chairmen's: Basel SOLAIMAN (IMT-Atlantique, FRANCE) & Zied LACHIRI (ENIT, TUNISIA) <u>1st Plenary Session</u> <i>"E2E Machine Learning Speech Processing"</i> by G�rard CHOLLET (CNRS-SAMOVAR, FRANCE)
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ATSIP CONFERENCE OPENING

10:00 – 10:30

10:30 – 11:30	PLENARY SESSION ROOM 1 Chairmen's: Basel SOLAIMAN (IMT-Atlantique, FRANCE) & Zied LACHIRI (ENIT, TUNISIA) <u>2nd Plenary Session</u> <i>"Promising applications of deep learning in medical image analysis"</i> by Habib ZAIDI (PINLAB, Geneva, SWITZERLAND)
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BREAK

11:30 – 12:30

Wednesday September 02, 2020 12:30 – 14:30

ROOM 1

Regular Session (RSW-B1)

IMAGE & VIDEO PROCESSING (IVP-S1)

Chairmen's: Ali DOUIK (ENISO, TUN) & Mounir SAYADI (ENSIT, TUN) & Mohamed BEN SLIMA (ENET'COM, TUN)

IVP-14 12:30-12:50	<i>Ultrasound water leakage image denoising the iterative MMSE filter</i> Mohamed Yahia, Md Maruf Mortula, Lutfi Albasha, Tarig Ali and Ameen Awwad
IVP-21 12:50-13:10	<i>Pedestrian detection for advanced driving assisting system: a transfer learning approach</i> Riadh Ayachi, Mouna Afif, Yahia Said and Mohamed Atri
IVP-24 13:10-13:30	<i>Recognizing signs and doors for Indoor Wayfinding for Blind and Visually Impaired Persons</i> Mouna Afif, Riadh Ayachi, Yahia Said, Edwige Pissaloux and Mohamed Atri
IVP-31 13:30-13:50	<i>An Efficient Parallel Implementation of Face Detection System Using CUDA</i> Hana Ben Fredj, Souhir Sghair and Chokri Souani
IVP-33 13:50-14:10	<i>Speckle denoising of the multipolarization images by hybrid filters</i> Mohamed Yahia, Tarig Ali and Md Maruf Mortula

Wednesday September 02, 2020 12:30 – 14:30

ROOM 2

Regular Session (RSW-B2)

MEDICAL IMAGES & APPLICATIONS (MIA-S1)

Chairmen's: Lamia SELLAMI (ISBS, ATMS, TUN) & Khalil CHTOUROU (CHU Sfax, TUN) & Mouna SAHNOUN (ENIS, TUN)

MIA-25 12:30-12:50	<i>A new approach for diagnosis of melanoma using the sparse auto-encoder for features detection and the SVM for classification</i> Nadia Smaoui and Imene Khanfir
MIA-6 12:50-13:10	<i>Glioblastomas brain Tumor Segmentation using Optimized U-Net architecture based Deep Fully Convolutional Networks (D-FCNs)</i> Hiba Mzoughi, Ines Njeh, Mohamed Ben slima, Chokri Mhiri and Kheireddine Mahfoudh
MIA-46 13:10-13:30	<i>Quantification of left ventricular function in MRI: a review of current approaches</i> Wafa Baccouch, Sameh Oueslati, Salam Labidi and Basel Solaiman
MIA-48 13:30-13:50	<i>Computerized Image Segmentation of Multiple Sclerosis Lesions Using Fuzzy Level Set Model</i> Chaima Dachraoui, Salam Labidi and Mouelhi Aymen
MIA-50 13:50-14:10	<i>Semi-automatic segmentation of intervertebral disc for diagnosing Herniation using Axial View MRI</i> Wafa Mbarki, Moez Bouchouicha, Frederick Tshibusu and Mounir Sayadi

Wednesday September 02, 2020 12:30 – 14:30

ROOM 3

Regular Session (RSW-B3)

REMOTE SENSING & APPLICATIONS (RSA-S1)

Chairmen's: Abdelmalik TOUMI (ENSTA, FRA) & Abdelaziz KALLEL (CNRS-Sfax, TUN) & Mohamed FARAH (ISAMS, TUN)

RSA-29 12:30-12:50	<i>Soil salinity prediction using machine learning approach through hyperspectral satellite image</i> Salim Klibi, Kais Tounsi, Zouhaier Ben Rebah, Basel Solaiman and Imed Riadh Farah
RSA-35 12:50-13:10	<i>Target recognition from ISAR image using polar mapping and shape matrix</i> Jean-Christophe Cexus, Abdelmalek Toumi and Maroua Riahi
RSA-60 13:10-13:30	<i>Soil Moisture Estimation at 500m using Sentinel-1: application to Tunisian sites</i> Myriam Foucras, Mehrez Zribi and Abdelaziz Kallel
RSA-69 13:30-13:50	<i>Suspicious Local Event Detection in Social Media and Remote Sensing: Towards a Geosocial Dataset Construction</i> Marwen Bouabid, Mohamed Farah and Imed Riadh Farah

BREAK

14:30 – 15:00

Wednesday September 02, 2020 15:00 – 17:00

ROOM 1

Special Session (SSW-C1)

UNCONVENTIONAL TOOLS FOR SMART SIGNAL & IMAGE PROCESSING (USIP)

Chairmen's: Hassene SEDDIK (ENSIT, TUN) & Nawres KHLIFA (ISTMT, TUN) & Fathi KALLEL (ENET'COM, TUN)

USIP-43 15:00-15:20	<i>Detection of Epileptic High Frequency Oscillations Using Support Vector Machine</i> Sahbi Chaibi, Fatma Krikid, Chahira Mahjoub, Tarek Lajnef, Regine Le-Bouquin Jeannes and Abdennaceur Kachouri
USIP-95 15:20-15:40	<i>A survey on deep learning techniques used for breast cancer detection</i> Bochra Jaafar, Hela Mahersia and Zied Lachiri
USIP-96 15:40-16:00	<i>Performance Evaluation of Various Denoising Filters and segmentation methods for OCT images</i> Abir Chaari, Khouloud Kammoun, Imen Fourati Kallel, Mondher Frikha and Sonda Kammoun
USIP-100 16:00-16:20	<i>Real time emotion recognition in video stream, using B-CNN and F-CNN</i> Ramzi Guetari, Aladine Chetouani, Hedi Tabia and Nawres Khelifa
USIP-131 16:20-16:40	<i>Preprocessing Latent-Fingerprint Images For Improving Segmentation Using Morphological Snakes</i> Hajer Walhazi, Lamia Rzunga Haddada, Ahmed Maalej and Najoua Essoukri Ben Amara

Wednesday September 02, 2020 15:00 – 17:00

ROOM 2

Regular Session (RSW-C2)

IMAGE & VIDEO PROCESSING (IVP-S2)

Chairmen's: Mondher FRIKHA (ENET'COM, TUN) & Mohamed ABID (ENIS, TUN) & Ahmed BEN HAMIDA (ENIS, TUN)

IVP-5 15:00-15:20	<i>Unconstrained Face Verification Based on Monogenic Binary Pattern and CNN</i> Bilel Ameer, Mebarka Belahcene, Sabeur Masmoudi and Ahmed Ben Hamida
IVP-9 15:20-15:40	<i>Audio-visual Biometric Performance Evaluation Methodologies for the H2020 SpeechXrays Project</i> Aymen Mtibaa, A. Ben Hamida, M. Amine Hmani, D. Petrovska-Delacrétaz, C. Bauzou, M. Kockmann, C. Narr, A. Nicolin, E. Spanakis, I. Crucianu, I. Markopoulos, J. Perez and J. Boudy
IVP-37 15:40-16:00	<i>Evaluation of the H2020-project Cancelable Face System Under the Framework of ISO/IEC 24745:2011</i> M. Amine Hmani, A. Mtibaa, D. Petrovska-Delacrétaz, Iacob Crucianu and Claude Bauzou
IVP-38 16:00-16:20	<i>Efficient Statistical Learning Framework with Applications to Human Activity and Facial Expression Recognition</i> Fatma Najjar, Sami Bourouis, Marwan Alshar'E, Roobaea Alroobaea, N. Bouguila, A. Al-Badi
IVP-39 16:20-16:40	<i>Blurred image Detection in Drone embedded System</i> Gueraichi Ratiba and Amina Serir
IVP-45 16:40-17:00	<i>Morphological-based microcalcification detection using adaptive thresholding and structural similarity indices</i> Asma Touil, Karim Kalti, Pierre-Henri Conze, Basel Solaiman and Mohamed Ali Mahjoub

Wednesday September 02, 2020 15:00 – 17:00

ROOM 3

Regular Session (RSW-C3)

SIGNAL PROCESSING IN COMMUNICATIONS NETWORKS (SCN)

Chairmen's: Lotfi KAMMOUN (ENIS, TUN) & Mohamed GHORBEL (ENET'COM, TUN)

SCN-80 15:00-15:20	<i>Deep learning for internet of things in fog computing: Survey and Open Issues</i> Jihene Tmamna, Emna Ben Ayed and Mounir Ben Ayed
SCN-88 15:20-15:40	<i>Low Cost and Low Power Stacked Sparse Autoencoder Hardware Acceleration for Deep Learning Edge Computing Applications</i> Tarek Belabed, Maria Gracielly F. Coutinho, Marcelo A. C. Fernandes, Carlos Valderrama and Chokri Souani
SCN-99 15:40-16:00	<i>DOS Attack Model Using Fusion Feature Based on Fuzzy C-Means Clustering Algorithm in DNS Protocol</i> Adel Dallali, Takwa Omrani and Belgacem Chibani Rhaimi
SCN-123 16:00-16:20	<i>Efficient Routing Protocol for Wireless Sensor Network based on Reinforcement Learning</i> Salah Eddine Bouzid, Youssef Serrestou, Kosai Raoof and Mohamed Nazih Omri
SCN-128 16:20-16:40	<i>4G and 5G technologies: A Comparative Study</i> Emna Hajlaoui, Aida Zaier, Abdelhakim Khelifi, Jihed Ghodhbane, Mouna Ben Hamed and Lassâad Sbata

ATSIP'2020 TECHNICAL PROGRAM

Thursday September 03, 2020

09:00 – 10:00	PLENARY SESSION ROOM 1 Chairmen's: Abdelaziz KALLEL (CNRS-Sfax, TUNISIA) & Imed Riadh FARAH (ISAMM, TUNISIA) 3rd Plenary Session: <i>"Spatial observation of the Earth for climate change monitoring"</i> by Mehrez ZRIBI (CESBIO, FRANCE)
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BREAK

10:00 – 10:30

Thursday September 03, 2020 10:30 – 12:30

ROOM 1

Regular Session (RST-A1)

IMAGE & VIDEO PROCESSING (IVP-S3)

Chairmen's: **Nouri MASMOUDI** (ENIS, TUN) & **Mohamed GHORBEL** (ENET'COM, TUN)

IVP-40 10:30-10:50	<i>AI-based pilgrim detection using convolutional neural networks</i> Marwa Ben Jabra, Adel Ammar, Anis Koubaa, Omar Cheikhrouhou and Habib Hamam
IVP-54 10:50-11:10	<i>An Efficient palm vein Region of Interest extraction method</i> Amira Oueslati Hermi
IVP-65 11:10-11:30	<i>Subjective evaluation of approximate Discrete Sine Transform for the Versatile Video Coding standard</i> Sonda Ben Jdidia, Mohamed Ben Amor, Fatma Belghith and Nouri Masmoudi
IVP-81 11:30-11:50	<i>Face emotion recognition from static image based on convolution neural networks</i> Mohamed Amin Nasri, Aymen Mtibaa, Mohamed Amine Hmani, Ahmed Ben Hamida and Dijana Petrovska
IVP-138 16:00-16:20	<i>Water turbidity estimation in water sampled images</i> Imen Montassar and Amel Benazza-Benyahia

Thursday September 03, 2020 10:30 – 12:30

ROOM 2

Regular Session (RST-A2)

MEDICAL IMAGES & APPLICATIONS (MIA-S2)

Chairmen's : Mounir SAYADI (ENSIT, TUN) & Khalil CHTOUROU (CHU-Sfax, TUN) & Ines NJAH (ISIMG, TUN)

MIA-51 10:30-10:50	<i>A Clinical Support System for Prediction of Heart Disease using Machine Learning Techniques</i> Halima El Hamdaoui and Saïd Boujraf
MIA-56 10:50-11:10	<i>Detecting Abnormal ventricular Contractility from Radionuclide Ventriculography Images</i> Halima Dziri, Mohamed Ali Cherni and Dorra Ben Sellem
MIA-64 11:10-11:30	<i>Optimal Parameters of Diffusion MRI measuring Corticospinal Tract Integrity in healthy subjects</i> Abderrazek Zeraii, Ines Ben Alaya, Mokhtar Mars, Cyrene Drissi and Tarek Kraiem

Thursday September 03, 2020 10:30 – 12:30

ROOM 3

Regular Session (RST-A3)

REMOTE SENSING & APPLICATIONS (RSA-S2)

Chairmen's: Mohamed FARAH (ISAMM, TUN) & Abdelaziz KALLEL (CNRS-Sfax, TUN) & Achraf MAKHLOUFI (ENET'COM, TUN)

RSA-137 10:30-10:50	<i>Why to model remote sensing measurements in 3D? Recent advances in DART: Atmosphere, Topography, large landscape, Chlorophyll Fluorescence and Satellite image inversion</i> Jean-Philippe Gastellu-Etchegorry
RSA-162 10:50-11:10	<i>Multi-label learning embedding approach based on multi-temporal spectral signature for hyperspectral images classification</i> Selim Hemissi and Abdullah Alhumaidi Alotaibi
RSA-146 11:10-11:30	<i>Sub-pixel Mapping Method based on Total Variation Minimization and Spectral Dictionary</i> Bouthayna Msellmi, Daniele Picone, Zouheir Ben Rabah and Imed Riadh Farah
RSA-89 11:30-11:50	<i>A review of drought monitoring using remote sensing and data mining methods</i> Raja Inoubli, Ali Ben Abbès, Riadh Imed Farah, Vijay Singh, Tsegaye Tadesse and Mohammad Taghi Sattari

BREAK

12:30 – 13:30

Thursday September 03, 2020 13:30 – 15:30

ROOM 1

Special Session (SST-B1)	
DATA & INFORMATION QUALITY (DIQ)	
Chairmen's: Sonda AMMAR BOUHAMED (University of Sfax, TUN) & Imen KHANFIR KALLEL (ISBS, Sfax, TUN)	
DIQ-41 13:30-13:50	<i>Binary hierarchical multiclass classifier for uncertain numerical features</i> Marwa Chakroun, Amal Charfi, Sonda Ammar Bouhamed, Imene Khanfir Kallel, Basel Solaiman and Houda Derbel
DIQ-92 13:50-14:10	<i>Data and information quality assessment in a possibilistic framework based on the Choquet Integral</i> Sonda Ammar Bouhamed, Hatem Dardouri, Imene Khanfir Kallel, Eloi Bossé and Basel Solaiman
DIQ-93 13:10-14:30	<i>Combined Optical Coherence Tomography and Ultrasound assisted analysis for retinal detachment in morning glory syndrome</i> Marwa Hani, Amine Ben Slama, Nesrine Slokom, Hedi Trabelsi, Imen Zghal and Ezeddine Sediki
DIQ-140 14:30-14:50	<i>Generation of fuzzy evidence numbers for the evaluation of uncertainty measures</i> Samia Barhoumi, Imene Khanfir Kallel, Sonda Ammar Bouhamed, Eloi Bossé and Basel Solaiman

Thursday September 03, 2020 13:30 – 15:30

ROOM 2

Regular Session (RST-B2)	
IMAGE & VIDEO PROCESSING (IVP-S4)	
Chairmen's: Mondher FRIKHA (ENET'COM, TUN) & Imed Riadh FARAH (ISAMM, TUN) & Jihene BOUGHARRIOU (ENIS, TUN)	
IVP-86 13:30-13:50	<i>Analysis of Coding and Transfer of Arien Video Sequences from H.264 Standard</i> Donia Ammous, Abdelaziz Kallel, Fahmi Kammoun and Nouri Masmoudi
IVP-66 13:50-14:10	<i>Early Diagnosis of Diabetic Retinopathy using Random Forest Algorithm</i> Nihel Zaaboub and Ali Douik
IVP-87 14:10-14:30	<i>Medication Code Recognition using Convolutional Neural Network</i> Ahmed Zaafouri and Mounir Sayadi
IVP-107 14:30-14:50	<i>Multi-Object tracking based on Kalman Filtering Combining Radar and Image Measurements</i> Mohamed Tlig, Moez Bouchouicha, Mounir Sayadi and Eric Moreau
IVP-122 14:50-15:10	<i>Multi-shot person re-identification based adaptive key frame selection</i> Yousra Hadj Hassen, Tarek Ouni, Walid Ayedi, Kais Loukil and Mohamed Jallouli

Thursday September 03, 2020 13:30 – 15:30

ROOM 3

Regular Session (RST-B3)

SPEECH & AUDIO PROCESSING (SAP)

Chairmen's : Gerard CHOLLET (CNRS-SAMOVAR, FRA) & Jean-Paul HATON (Université de Lorraine, FRA)

SAP-27 13:30-13:50	<i>Monaural speech separation based on linear regression optimized using gradient descent</i> Belhedi Wiem
SAP-42 13:50-14:10	<i>3D Convolutional Recurrent Global Neural Network for Speech Emotion Recognition</i> Baraa Zayene, Chiraz Jlassi and Najet Arous
SAP-73 14:10-14:30	<i>Adding dimensional features for emotion recognition on speech</i> Leila Ben Letaifa, M. Ines Torres and Raquel Justo
SAP-90 14:30-14:50	<i>Speech spoofing detection using SVM and ELM technique with acoustic features</i> Raoudha Rahmeni, Anis Ben Aicha and Yassine Ben Ayed
SAP-152 14:50-15:10	<i>Laughter synthesis: A comparison between Variational autoencoder and Autoencoder</i> Nadia Mansouri and Zied Lachri
SAP-153 15:10-15:30	<i>Combining Speech Features for Aggression Detection Using Deep Neural Networks</i> Noussaiba Jaafar and Zied Lachri
SAP-82 15:30-15:50	<i>Modern standard Arabic speech corpus for Text to Speech Synthesis</i> Oumaima Zine and Abdelouafi Meziane

PLENARY SESSION

ROOM 1

Chairmen's: Ahmed BEN HAMIDA (ENIS, TUNISIA) & Gerard CHOLLET (CNRS-SAMOVAR, FRANCE)

15:30 – 16:30

4thPlenary Session

"Adversarial attacks on machine learning systems"

by Bhiksha RAJ (Carnegie Mellon University, Pittsburgh, PA, United States)

ATSIP'2020 TECHNICAL PROGRAM

Friday September 04, 2020

	PLENARY SESSION ROOM 1 Chairmen's: Abdelmalik TOUMI (ENSTA, FRANCE) & Gerard CHOLLET (CNRS-SAMOVAR, FRANCE)
09:30 – 10:30	5th Plenary Session "Sensors, EM modeling, inversion problem and oceanic remote sensing"
08:30 -09:30 (GMT)	by Ali KHENCHAF (Lab STICC UMR CNRS 6285 Laboratory, ENSTA Bretagne, 29806, Brest, cedex 09, FRANCE)

	PLENARY SESSION ROOM 1 Chairmen's: Ali KHENCHAF (ENSTA, FRANCE) & Gerard CHOLLET (CNRS-SAMOVAR, FRANCE)
10:30 – 11:30	6th Plenary Session "Modeling and Artificial Intelligence: a fruitful combination"
	by Jean-Paul HATON (Université de Lorraine, FRANCE)

ATSIP'2020 TECHNICAL PROGRAM

Friday September 04, 2020

BREAK

11:30 – 12:30

10:30-11:30 (GMT)

Friday September 04, 2020 12:30 – 14:30

ROOM 1

Regular Session (RSF-A1)

IMAGE & VIDEO PROCESSING (IVP-S5)

Chairmen's: Mounir BEN AYED (FSS, TUN) & Ali Wali (ISIMS, TUN) & Omar TRIGUI (ENIS, TUN)

IVP-124 12:30-12:50	<i>Vehicle detection for intelligent traffic surveillance system</i> Nesrine Abid, Tarek Ouni and Mohamed Abid
IVP-126 12:50-13:10	<i>Deep CNN-based Pedestrian Detection for Intelligent Infrastructure</i> Bilel Tarchoun, Imen Jegham, Anouar Ben Khalifa, Ihsen Alouani and Mohamed Ali Mahjoub
IVP-127 13:10-13:30	<i>A Dual Watermarking Approach for DICOM Images</i> Mayssa Tayachi, Laurent Nana, Faouzi Benzarti and Anca Cristine Pascu
IVP-129 13:30-13:50	<i>Demographic Face Profiling Based on Age, Gender and Race</i> Asma El Kissi Ghalleb, Safa Boumaiza and Najoua Essoukri Ben Amara
IVP-143 13:50-14:10	<i>Structure relationship classification for the recognition of mathematical expression handwritten en Arabic</i> Ibtissem Hadj Ali and Mohamed Ali Mahjoub
IVP-77 14:10-14:30	<i>High-level design of HEVC intra prediction algorithm</i> Ahmed Ben Atitallah and Manel Kammoun

Friday September 04, 2020 12:30 – 14:30

ROOM 2

Regular Session (RSF-A2)

MEDICAL IMAGES & APPLICATIONS (MIA-S3)

Chairmen's: Lamia SELLAMI (ISBS, TUN) & Ines NJEH (ISIMG, TUN) & Jihene BOUGHARRIOU (ENIS, TUN)

MIA-3 12:30-12:50	<i>Contrast-Enhanced Image Analysis for MRI Based Multiple Sclerosis Lesion Segmentation</i> Mouna Sahnoun, Fathi Kallel, Ahmed Ben Hamida, Chokri Mhiri and Kheireddine Mahfoudh
MIA-97 12:50-13:10	<i>Conventional Machine Learning Techniques with Features Engineering for Preventive Larynx Cancer Detection</i> Anis Ben Aicha
MIA-70 13:10-13:30	<i>Nuclei Segmentation Approach for Digestive Neuroendocrine Tumors analysis using optimized color space conversion</i> Hana Rmili, Basel Solaiman, Aymen Mouelhi, Raoudha Doghri and Salam Labidi
MIA-76 13:30-13:50	<i>Melanoma skin cancer detection using deep learning and classical machine learning techniques: A hybrid approach</i> Jinen Daghrir, Lotfi Tlig, Moez Bouchouicha and Mounir Sayadi

MIA-79 13:50-14:10	<i>A Multiview Deep Convolutional Neural Network for Reduction of False Positive Findings in Breast Cancer Screening</i> Nouha Derbel, Hédi Tmar and Adel Mahfoudhi
MIA-91 14:10-14:30	<i>Automatic segmentation of medical images using convolutional neural networks</i> Sourour Mesbahi and Hedi Yazid

Friday September 04, 2020 12:30 – 14:30

ROOM 3

Regular Session (RSF-A3)

EMBEDDED SYSTEMS & RADIO-FREQUENCY APPLICATIONS (ESRA)

Chairmen's: Habib Hamam (UMoncton, CAN) & Mounir SAMET (ENIS,TUN) & Marwa CHAABANE (ENIS, TUN)

ESRA-17 12:30-12:50	<i>Identification of the user by using a hardware device</i> Habib Hamam
ESRA-22 12:50-13:10	<i>Lightweight Hardware Architectures for the Piccolo Block Cipher on FPGA</i> Ayoub Mhaouch, Wajdi Elhamzi and Atri Mohamed
ESRA-94 13:10-13:30	<i>Multi-band Frequency Reconfigurable Planar Bow-tie Antenna</i> Mariam Mabrouki and Ali Gharsallah
ESRA-136 13:30-13:50	<i>The Design, by Physical Topology Optimizing, of a Passive UHF RFID Identification System: Suitable for Applications with Various Constraints</i> Rahma Zayoud and Habib Hamam
ESRA-142 13:50-14:10	<i>The Secured AES designs against Fault Injection Attacks: A comparative Study</i> Noura Benhadjyoussef and Mouna Karmani
ESRA-147 14:10-14:30	<i>A Hardware-Software Codesign Case Study: The SHA3-512 algorithm Implementation on the LEON3 Processor</i> Mouna Karmani and Noura Benhadjyoussef

Friday September 04, 2020 14:30 – 16:00

ROOM 1

Regular Session (RSF-C1)

IMAGE & VIDEO PROCESSING (IVP-S6)

Chairmen's: Ali DOUIK (ENISO, TUN) & Mongi LAHIANI (ENIS, TUN) & Fathi KALLEL (ENET'COM, TUN)

IVP-151 14:30-14:50	<i>Fast pore matching method based on core point alignment and orientation</i> Houda Khmila, Imene Khanfir Kallel, Samia Barhoumi, Nadia Smaoui and Houda Derbel
IVP-4 14:50-15:10	<i>A Comparative Study of Fingerprint Enhancement Algorithms</i> Sarra Hajri and Fathi Kallel And Ahmed Ben Hamida
IVP-85 15:10-15:30	<i>Comparison Study for Personal Recognition Using Finger-Knuckle-Print Modality</i> Sarra Hajri and Fathi Kallel And Ahmed Ben Hamida

USIP-43 15:30-15:50	<i>Detection of Epileptic High Frequency Oscillations Using Support Vector Machine</i> Sahbi Chaibi, Fatma Krikid, Chahira Mahjoub, Tarek Lajnef, Regine Le-Bouquin Jeannes and Abdennaceur Kachouri
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Friday September 04, 2020 14:30 – 16:00 ROOM 2	
Regular Session (RSF-C2) DATA FUSION & MODELING (DFM) Chairmen's : Mohamed FARAH (ISAM, TUN) & Imed Riadh FARAH (ISAM, TUN) & Abdelaziz KALLEL (CNRS, TUN)	
DFM-63 14:30-14:50	<i>Efficient possibilistic method for detection and matching features using BRISK</i> Wissal Ben Marzouka, Basel Solaiman, Atef Hammouda, Zouhour Ben Dhiaf and Khaled Bsaies
DFM-74 14:50-15:10	<i>Robust GPS/Galileo/GLONASS Data Fusion Using Extended Kalman Filter</i> Truong Ngoc Tan, Ali Khenchaf, Fabrice Comblet, Pierre Franck, Jean-Marc Champeyroux and Olivier Reichert
DFM-108 15:10-15:30	<i>A new features vecteur matching for big heterogeneous data in intrusion detection context</i> Marwa Ayni, Farah Jemili, Ouajdi Korbaa and Basel Solaiman
DFM-145 15:30-15:50	<i>Case-Based Reasoning: Problems and Importance Of Similarity Measure</i> Ikram Chourib, Gwenael Guillard, Makram Mestiri, Basel Solaiman and Imed Riadh Farah

Friday September 04, 2020 14:30 – 16:00 ROOM 3	
Special Session (SSF-C3) MEDICAL APPLICATIONS FOR DOCTOR'S ASSISTANCE BASED EEG AND EMG SIGNALS Chairmen's: Hassene SEDDIK (ENSIT, TUN) & Itaf BEN SLIMEN (ENSIT, TUN) & Aicha BOUZID (ENIT, TUN)	
MAD-28 14:30-14:50	<i>Automated EEG Artifact Detection Using Independent Component Analysis</i> Amira ECHTIOUI, Wassim ZOUCHE, Mohamed GHORBEL, Mohamed Ben Slima, Ahmed Ben Hamida and Chokri Mhiri
MAD-53 14:50-15:10	<i>A multimodal Physiological-Based Stress Recognition: Deep Learning Models' Evaluation in Gamers' Monitoring Application</i> Sabrina Dhaouadi and Mohamed Moncef Ben Khelifa
MAD-84 15:10-15:30	<i>Automatic Recognition of Epileptiform EEG Abnormalities Using Machine Learning Approaches</i> Itaf Ben Slimen and Hassene Seddik
MAD-71 15:30-15:50	<i>Multidatabase ECG signal processing</i> Taissir Fekih Romdhane, Ridha Ouni and Mohamed Atri

MAD-141 15:50-16:10	<i>Monitoring Consciousness and spatiotemporal dynamics during complex focal seizures</i> <i>Ibtissem Khouaja, Imane Youkana and Mohamed Ali Saafi</i>
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	PLENARY SESSION ROOM 1
16:00 – 17:00	Chairmen's: Basel SOLAIMAN (IMT-Atlantique , FRA) & Ahmed BEN HAMIDA (ENIS , TUN)
15:00-16:00 (GMT)	<u>7thPlenary Session</u> "Joint contributions of neuroimaging and modeling to the early diagnosis of Alzheimer's disease" by Habib BEN ALI (Department of Electrical and Computer Engineering Faculty of Engineering and Computer Science Concordia University Montreal, QC, Canada)

ATSIP'2020 TECHNICAL PROGRAM

Saturday September 05, 2020

09:00 – 10:00 08:00-09:00 (GMT)	PLENARY SESSION ROOM 1 Chairmen's: Basel SOLAIMAN (IMT-Atlantique , FRA) & Ahmed BEN HAMIDA (ENIS, TUNISIA) 8th Plenary Session "Face Recognition: Where is the Bias?" by Dijana PETROVSKA-DELACRETAZ (TELECOM SudParis, FRANCE)
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Saturday September 05, 2020 10:30 – 12:30

ROOM 1

Regular Session (RSS-A2)

MEDICAL IMAGES & APPLICATIONS (MIA-S4)

Chairmen's: **Imene KHANFIR** (ISBS, ATMS, TUN) & **Khalil CHTOUROU** (CHU-Sfax, TUN) & **Mohamed BEN SLIMA** (ENET'COM, TUN)

MIA-139 10:00-10:20	<i>e-ASPECTS for early detection and diagnosis of ischemic stroke</i> Haifa Touati, Jihene Boughariou, Lamia Sellemi and Ahmed Ben Hamida
MIA-150 10:20-10:40	<i>Denoising techniques for multi-parametric prostate MRI: A Comparative Study</i> Afef Latrach, Rania Trigui and Lamia Sellemi
MIA-166 10:40-11:10	<i>Comparison Study for Spinal Cord Segmentation Methods aiming to detect SC Atrophy in MRI images: case of Multiple Sclerosis</i> Basma Mnassri, Mouna Sahnoun and Ahmed Ben Hamida
MIA-168 11:10-11:30	<i>fMRI imaging based on different brain parcellations : review</i> Fatma Abdeddayem, Fathi Kallel, Ahmed Ben Hamida and Lamia Sellami
MIA-164 11:30-11:50	<i>Multimodal Medical Image Registration Based on a Hybrid Optimization Strategy</i> Asma Daly, Hedi Yazid, Basel Solaiman and Najoua Essoukri Ben Amara
MIA-12 11:50-12:10	<i>The effect of 3D-MRI Modalities Mixture in glioma delimitation</i> Hana Bouchouicha, Olfa Ben Sassi, Ahmed Ben Hamida, Chokri Mhiri and Mariem Dammak
MIA-56 12:10-12:30	<i>Detecting Abnormal ventricular Contractility from Radionuclide Ventriculography Images</i> Halima Dziri, Mohamed Ali Cherni and Dorra Ben Sellem

Saturday September 05, 2020 10:30 – 12:30

Room 2

Regular Session (RSS-A2)

MODELING IN SIGNAL & IMAGES (MSI)

Chairmen's: Maher KHARRAT (ENET'COM, TUN) & Sofia BEN JEBARA (SUPCOM, TUN) & Marwa CHAABANE (ENIS, TUN)

MSI-1 10:00-10:20	<i>Enhanced data-driven Damage Detection for Structural Health Monitoring Systems</i> Marwa Chaabane, Ahmed Ben Hamida, Majdi Mansouri, Hazem Nounou and M. Nounou
MSI-11 10:20-10:40	<i>EWMA Kernel Generalized Likelihood Ratio Test for Fault Detection of Chemical Processes</i> Raoudha Baklouti, Majdi Mansouri, Ahmed Ben Hamida, Mohamed Nounou and H. Nounou
MSI-13 10:40-11:10	<i>Fault Detection in Waste Water Treatment Plants using Improved Particle Filter-based Optimized EWMA</i> Imen Baklouti, Ahmed Ben Hamida, Majdi Mansouri, Mohamed Nounou and Hazem Nounou
MSI-47 11:10-11:30	<i>Feature Optimization for Gifted Children Diagnosis</i> Kawther Benharrath, Mounir Sayadi and Balkine Khaddoumi
MSI-75 11:30-12:50	<i>Investigation of bio-mechanical indicators to explore the performance of mental preparation</i> Sofia Ben Jebara and Giovanni De Marco
MSI-148 11:50-12:10	<i>Embedded Landmark implementation for Deep Learning pre-processing</i> Hedi Choura, Tarek Frikha, Mouna Baklouti and Faten Chaabane
MSI-72 12:10-12:30	<i>Classification Of DNA Microarrays Using Deep Learning To identify Cell Cycle Regulated Genes</i> Hiba Lahmer, Afef Elloumi Oueslati and Zied Lachiri

12:30 – 13:00

CONFERENCE CLOSING CEREMONY