ATSIP'2016 TECHNICAL PROGRAM

Monday March 21, 2016

8:00 – 10:00

REGISTRATION OPEN

10:00 – 10:30
COFFEE BREAK

10:30 – 11:00

ATSIP CONFERENCE OPENING CEREMONY

11:00 – 12:30 **ROOM 0**	## PLENARY SESSION **Chairmen's : Noureddine ELLOUZE (ENIT, TUN) & Basel SOLAIMAN (Telecom Bretagne, FRA) & Jean Paul HATON (U. Lorraine, FRA)** **1st Plenary Session : 11:00-11:45** *" 3D-Radiative Transfer Modeling: DART "* **by Jean Philippe GASTELLU-ETCHERGORY(CESBIO - UPS, CNES, CNRS, IRD, Université de Toulouse, France)** **Chairmen's : Lotfi KAMOUN (ENIS, TUN) & Zouheir FAKHFEKH (FSS, TUN) & Hedi BEDOUI (Fac Médecine, TUN) & Chokri MHIRI (CHU Sfax, TUN)** **2nd Plenary Session: 11:45-12:30** *"Hybrid PET/MRI: Challenges and Opportunities"* **by Habib ZAIDI (Head of PET Instrumentation & Neuroimaging Laboratory –PINLab, Geneva University Hospital, SWITZERLAND)**

Monday March 21, 2016 : 12:30 – 14:30 **LUNCH**

Monday March 21, 2016 : 14:30 – 16:00 **ROOM 0**

Regular Session (RSM-A0) **MEDICAL IMAGES & APPLICATIONS (MIA-S1)** **Chairmen's : Mounir SAYADI (ENSIT, TUN), Ramzi MAALEJ (FSS, TUN) & Khalil CHTOUROU (CHU Sfax, TUN)**

MIA-48	Blood Vessel Segmentation Methodology In Retinal Images *Mariem Ben Abdallah, Amira Hadj Fredj and Jihene Malek*
MIA-34	Atrial Fibrillation Detection on Electrocardiogram *Rebeh Mabrouki, Balkine Khaddoumi and Mounir Sayadi*
MIA-43	Denoising Uterine EMG Signals Using LMS and RLS Adaptive Algorithms *Manel Limem, Mohamed Ali Hamdi and Mhamed Ali Maaref*
MIA-130	A DWT/ANN Based Architecture for Epilepsy Diagnosis Using EEG Signals *Djemal Ridha and Alsharabi Khalil*
MIA-53	New Anisotropic Diffusion Function For Medical Image Enhancement *Sondes Tebini, Hassene Seddik and Ezzedine Ben Braiek*
MIA-186	A Preliminary Investigation in SPECT Image Denoising with Exposure Time Reduction *Sourour Gargouri, Fatma Makhlouf and Hatem Besbes*

Monday March 21, 2016: 14:30 – 16:00
ROOM 1

Special Session (RSM-A1)

MICROWAVE REMOTE SENSING (RSA-S1)

Chairmen's: J. Philippe GASTELLU-ETCHERGORRY (CESBIO, FRA) & Abdelaziz KALLEL (ATMS, TUN)

RSA-194	Effect of Soil Roughness on Backscattered P-band Radar Signals *Mehrez Zribi, Mouna Sahnoun and Ahmed Ben Hamida*
RSA-207	Analysis of P-Band Radar Signal Potential to Retrieve Soil Moisture Profile *Mehrez Zribi, Mouna Sahnoun and Ahmed Ben Hamida*
RSA-138	Yield Estimation of the Winter Wheat Using RADARSAT 2 Polarimetric SAR Response *Meriem Barbouchi, Riadh Abdelfattah, Karem Chokmani and Nadhira Ben Aissa*
RSA-139	Comparative Study to Simulate Soil Physical Parameters *Ibtissem Hosni, Lilia Bennaceur Farah, Saber Naceur and Imed Riadh Farah*
RSA-97	Fusion of Spatial Autocorrelation and Spectral Data for Remote Sensing Image Classification *Fatma Haouas, Zouhour Ben Dhiaf and Basel Solaiman*

Monday March 21, 2016: 14:30 – 16:00
ROOM 2

Regular Session (RSM-A2)

MODELING IN SIGNALS & IMAGES (MSI-S1)

Chairmen's : Mohamed BEN MESSAOUD (ATMS, TUN), Hamadi GHARIANI (ENIS, TUN) & Zouheir FAKHFEKH (FSS, TUN)

MSI-3	Use of Ridgelets and Curvelets - Application to Face Recognition *Tarek Frikha, Yamen Siala and Mohamed Abid*
MSI-16	Parametric Study of Implantable Planar Inverted-F Antenna for Wireless Body Area Network Application *Amal Bouazizi, Ghada Zaibi, Nejah Nasri, Mounir Samet and Abdennaceur Kachouri*
MSI-20	Determination of Cardiovascular Parameters from Bioimpedance Signal *Asma Ayadi, Ridha Ben Salah, Kais Ouniand Wassila Sahtout*
MSI-23	Vessel Centerlines Detection By Neuro-Fuzzy and Wavelet Multiscale Product in Digital Retinal Images *Fatma Zribi and Noureddine Ellouze*
MSI-239	Color texture characterization based on the extended relative phase ERP in the complex wavelets domain

	Enrif Madina, Ahmed Drissi El Maliani, Mohammed El Hassouni and Said El Alaoui Ouatik

Monday March 21, 2016: 14:30 – 16:00
ROOM 3

	Regular Session (RSM-A3)
	COMPUTER IMAGES & VIDEO PROCESSING (IVP-S1)
	Chairmen's : Ezzeddine BEN BRAIEK (ENSIT, TUN) & Ali DOUIK (ENISO, TUN)
IVP-32	Real Time Recognition of Road Traffic Signs in Video Scenes *Wajdi Farhat, Hassene Faiedh, Chokri Souani and Kamel Besbes*
IVP-33	A clock gating design for high speed treatment and optimized power of image processing circuit *Siwar Ben Haj Hassine and Bouraoui Ouni*
IVP-42	Joint pre-processing phase to optical correlator for face recognition applications *Fatma Bouzidi, M. Elbouz, A Alfalou and Ahmed Fakhfakh*
IVP-185	Hardware Architecture Road Sign Detection by Template Matching Using Correlation *Sana Bougharriou, Faycel Hamdaoui and Abdellatif Mtibaa*
IVP-65	Towards a New Approach for an Effective Image Retrieval Based on Oracle DBMS *Kaouther Zekri, Amel Grissa Touzi and Noureddine Ellouze*

Monday March 21, 2016: 14:30 – 16:00
ROOM 4

	Regular Session (RSM-A4)
	SPEECH & AUDIO PROCESSING (SAP-S1)
	Chairmen's : Jean Paul HATON (U. Lorraine, FRA) & Zied LACHIRI (ENIT, TUN)
SAP-10	Possibilistic Support Vector Machines for Automatic Phoneme Recognition *Rimah Amami, Noureddine Ellouze and Imen Trabelsi*
SAP-84	FPGA Implementation of an Automatic Wheezes Detector Using MFCC and SVM *Ons Boujelben and Mohammed Bahoura*
SAP-22	Reassignment Method for Audio Sounds Classification *Sameh Souli and Zied Lachiri*
SAP-195	Improving Text-independent Speaker Recognition with GMM *Rania Chakroun, Leila Beltaïfa Zouari, Mondher Frikha and Ahmed Ben Hamida*
SAP-35	Usable Speech Improvement for Speaker Identification System *Wajdi Ghezaiel, Amel Ben Slimane and Ezzedine Ben Braiek*

Monday March 21, 2016: 16:00 – 16:30
COFFEE BREAK

Monday March 21, 2016: 16:30 – 18:00
ROOM 0

	Regular Session (RSM-B0)
	MEDICAL IMAGES & APPLICATIONS (MIA-S2)
	Chairmen's : Hedi BEDOUI (Fac. Medicine, TUN) & Lamia SELLAMI (ATMS, TUN)
MIA-82	Optimal Wavelet Selection for Heart Rate Detection from Abdominal ECG Using a Multiscale Product

	Malek Najeh, Aicha Bouzid and Noureddine Ellouze
MIA-64	An FPGA-Based System for Real-Time Electrocardiographic Detection of STEMI *El Hassan Elmimouni, Mohammed Karim , Mohamed-Yassine Amarouchand Mustapha El-Kouache*
MIA-197	Frequency recognition based on the Inter-Battery Factor Analysis for SSVEP-Based BCIs *Omar Trigui, Wassim Zouch and Mohamed Ben Messaoud*
MIA-235	Towards a Computer Tool for Automatic Detection of Laryngeal Cancer *Kadria Ezzine, Zaineb Ben Messaoud, Mondher Frikha and Ahmed Ben Hamida*
MIA-168	Segmentation of Cystoids Macular Edema in Optical Coherence Tomography *Nesrine Slokom, Imen Zghal and Hedi Trabelsi*
MIA-136	Features Extraction for Medical Characteristics of Nystagmus Analysis *Amine Ben Slama, Aymen Mouelhi and Mohamed Ali Cherni*

Monday March 21, 2016: 16:30 – 18:00

ROOM 1

Regular Session (RSM-B1)

REMOTE SENSING AND ASSIMILATION (RSA-S2)

Chairmen's : Ali KHENCHAF (ENSTA-Bretagne, FRA) & Saber Mohamed NACEUR (ENIT, TUN) & Mohamed FARAH (ISAMM, TUN)

RSA-107	Towards an ontological conceptualization for understanding the dynamics of spatio-temporal objects *Fethi Ghazouani, Wassim Messaoudi and Imed Riadh Farah*
RSA-1	Bias Characterization in H/A/α Polarimetric SAR Decomposition and its Effect for the Classification *Mohamed Yahia, Marwa Chabir, Faten Khalfa and Taoufik Aguili*
RSA-117	Sensitivity Analysis for Land Cover Change Prediction Model with Correlated Inputs in Presence of Epistemic and Aleatory Imperfection *Zouhaira Ayadi, Wadii Boulila and Imed Riadh Farah*
RSA-45	Efficient Source Separation Algorithm based on NMF Approach *Sami Cherif, Hassen Lazreg, Kamel Aloui and Med Saber Naceur*
RSA-50	Evaluation and Predictability of Water erosion Based on Spectral Information Analysis *Zouhaier Ben Rabah and Imed Riadh Farah*

Monday March 21, 2016: 16:30 – 18:00
ROOM 2

Regular Session (RSM-B2)

MODELING IN SIGNALS & IMAGES (MSI-S2)

Chairmen's : Kais OUNI (ENI Carthage Tn) & Majdi MANSOURI (Texas University, QATAR)

MSI-66	A Comparison between ANN and SVM Classifier for Drowsiness Detection Based on Single EEG Channel *Ibtissem Belakhdar, Walid Kaaniche, Ridha Djemal and Bouraoui Ouni*
MSI-76	Gabor-SVM Applied to 3D-2D Deformed Mesh Model *Ghada Torkhani, Anis Ladgham, Nejib Mansouri and Anis Sakly*
MSI-93	Fusing Gabor and LBP Feature Sets for KNN and SRC-based Face Recognition *Bilel Ameur, Amira Guidara Derbel, Sabeur Masmoudi and Ahmed Ben Hamida*
MSI-106	SOM Variants for Topological Horizontal Collaboration *Ameni Filali, Chiraz Jlassi and Najet Arous*

MSI-134	Bayesian Method for States Estimation in Structural Health Monitoring Application
	Marwa Chaabane, Majdi Mansouri, Nouha Jaoua, Ahmed Ben Hamida and Hazem Nounou

Monday March 21, 2016: 16:30 – 18:00
ROOM 3

Regular Session (RSM-B3)
COMPUTER IMAGE & VIDEO PROCESSING (IVP-S2)
Chairmen's : Najwa ESSOUKRI BEN AMARA (ENISO, TUN) & Aissa BELMEGUENAI (August 20 Univ., ALG)

IVP-51	Real time Ultrasound Image Denoising Using NVIDIA CUDA
	Amira Hadj Fredj and Jihene Malek
IVP-69	An improved selective spatio-temporal interest point detector
	Sarra Elabbessi, Mehrez Abdellaoui and Ali Douik
IVP-71	Content Based Image Retrieval using Local and Global features descriptor
	Leila Kabbai, Mehrez Abdellaoui and Ali Douik
IVP-72	Salient Regions Detection Method Inspired From Human Visual System Anatomy
	Aymen Azaza, Leila Kabbai, Mehrez Abdellaoui and Ali Douik
IVP-78	Document Class Recognition Using A Support Vector Machine Approach
	Jasem Mtimet and Hamid Amiri
IVP-140	Color Image Edge Detection Method Based on Multiscale Product using Gaussian Function
	Nadia Ben Youssef,Aicha Bouzid, Noureddine Ellouze

Monday March 21, 2016: 16:30 – 18:00

ROOM 4

Regular Session (RSM-B3)
SIGNAL PROCESSING FOR COMMUNICATIONS AND NETWORKS (SCN-S1)
Chairmen's: Lotfi KAMMOUN (ENIS,TUN) & Riadh ABDELFETTAH (SupCom, TUN)

SCN-62	Performance Evaluation of LTE Downlink with QPP Interleaver for Channel Encoder
	Nsiri Bechir, Mallouki Nasreddine, Ammar Mahmoud, Hakimi Walid
SCN-156	Performance Evaluation of Cognitive QoS routing protocol in Cognitive Radio Ad Hoc Networks
	Mallat Yosra, Ayadi Mohamed, Ayari Aymen and Tabaane Sami
SCN-25	The Nervous System Approach for Signal Processing and Communication in Intelligent Networks
	Safae El Abkari and Jamal Mhamdi
SCN-46	Design and Development of Miniaturized Circular Filter using Quarter Mode Substrate Integrated Waveguide Resonator
	Abdelkhalek Nasri, Hassen Zairi and Ali Gharsallah
SCN-55	Particle Swarm Optimisation based PTS for PAPR reduction in Wavelet OFDM systems
	Asma Bouhlel, Sakly Anis and Mohamed Nejib Mansouri

Monday March 22, 2016	
PANEL DISCUSSION	
18:00-19:00	
ROOM 1	**Panel 1:** *Cancelable Biometrics: A New Challenge for our Digital Society!* **Speaker:** Dijana PETROVSKA-DELACRETAZ (Télécom Paris, FRANCE) **Chairmen's:** Marie-Christine HATON (Loria, FRA) & Sofia BEN JBARA (SupCom, TUN)
ROOM 2	**Panel 2:** *Earth observation : from Research to Operational* **Speaker:** Mehrez ZRIBI (CESBIO, FRANCE) **Chairmen's:** Abdelaziz KALLEL (ATMS, TUNISIE) & Ali KHENCHAF (ENSTA-Bretagne, FRANCE)
ROOM 3	**Panel 3:** *Big Data, Cloud Computing, Internet of things: Between Myths and Realities* **Speaker :** Imed Riadh FARAH (ISAMM, TUN) & Yahia SLIMANI (ISAMM, TUN) **Chairmen's:** Abdelkerim BOURAMOUL (U. Constantine, ALGERIA)

ATSIP'2016 TECHNICAL PROGRAM
Tuesday March 22, 2016

9:00 – 10:00 ROOM 0	PLENARY SESSION **Chairmen's: Jean Philippe GASTELLU-ETCHERGORY(CESBIO, FRA) & Ezzeddine BEN BRAYEK (ENSIT, TUN) & Zied LACHIRI (ENIT, TUN)** **3rdPlenary Session** *"Data mining in Social Sciences and Humanities"* **by Habib HAMAM (Moncton University, CANADA)**
	10:00 – 10:30 **COFFEE BREAK**

Tuesday March 22, 2016: 10:30 – 12:30
ROOM 0

Special Session (SST-A0)

SIGNAL & IMAGE PROCESSING FOR EMOTION RECOGNITION

Chairman : Zied LACHIRI (ENIT, TUN) & Marie-Christine HATON (LORIA, FRA)

SIE-36	Automatic Emotion Recognition using Generative and Discriminative Classifiers in the GMM Mean Space *Imen Trabelsi, Rimah Amami, Dorra Ben Ayed and Noureddine Ellouze*
SIE-190	Wavelet Features Fusion for Emotion Sensing in Physiological Signals *Zied Guendil, Zied Lachiri, Choubeila Maaoui and Alain Pruski*
SIE-153	Emotional speaker recognition in simulated and spontaneous context *Asma Mansour and Zied Lachiri*
SIE-157	Multi-class SVM for stressed speech recognition *Salsabil Besbes and Zied Lachiri*
SIE-172	Speech emotion recognition in noisy environment *Farah Chenchah and Zied Lachiri*
SIE-57	The Influence of the Speaker on Indices of Phonation *Imen Daly, Zied Hajaiej and Ali Gharsallah*

Tuesday March 22, 2016: 10:30 – 12:30
ROOM 1

Special Session (SST-A1)

SIGNAL PROCESSING FOR RADIO-FREQUENCY SYSTEMS

Chairmen's: Habib HAMAM (U. Moncton, CAN) & Mounir SAMET (ENIS, TUN) & Hamadi GHARIANI (ENIS, TUN)

SRF-79	Design of Rectangular Microstrip Patch Antenna *Houda Werfelli, Khaoula Tayari, Mondher Chaoui, Mongi Lahiani, Hamadi Ghariani*

SRF-83	Miniaturization and Improvement of Rectangular Dipole Antenna using Novel Spiral Split Ring Resonators for UHF Applications *Mahdi Abdelkarim, Seif Naoui and Ali Gharsallah*
SRF-112	Conception and simulation of above-IC CPW antenna *Bassem Jmai, Adnen Rajhi and Ali Gharsallah*
SRF-113	Design of a Chipless RFID TAG based on the frequency shift technique for K band *Omrane Necibi and Ali Gharsallah*
SRF-116	A Novel H-shaped cavity based RFID Chipless tag *Soumaya Sakouhi, Hedi Raggad, Ali Gharsallah and Mohamed Latrach*
SRF-166	Design of six bit Semiconductor Phase Shifter For Radar Application *Mariem Mabrouki, Ridha Gayoula and Ali Gharsallah*

Tuesday March 22, 2016: 10:30 – 12:30
ROOM 2

Regular Session (RST-A2)	
SIGNAL PROCESSING FOR COMMUNICATIONS AND NETWORKS (SCN-S2)	
Chairmen's: Mongi LAHIANI (ENIS, TUN) & Sihem CHAABOUNI (ENET'Com, TUN)	
SCN-164	Phase-Precoding Scheme for Cooperative Wireless Systems over Frequency-Selective Channels *Mariem Ayedi, Noura Sellami and Mohamed Siala*
SCN-165	Iterative Receiver for Cooperative Wireless Systems using Analog Network Coding Scheme *Mariem Ayedi, Sihem Chaabouni, Noura Sellami and Mohamed Siala*
SCN-80	Modeling of the thorax of human body at 433 MHz *Khaoula Tayari, Houda Werfelli, Mondher Chaoui, Hamadi Ghariani and Mongi Lahiani*
SCN-88	3.1-10.6 GHz high linearity, excellent gain flatness CMOS Power Amplifier for UWB Applications using stagger tuning technique *Hanen Saoudi, Mohamed Dhieb, Hamadi Gharieni and Mongi Lahiani*
SCN-101	Carrier Frequency Offset Estimation using Fractional Fourier Transform and CAZAC sequences *Rezgui Cherif and Grayaa Khaled*
SCN-24	Indoor RFID Alignment System for Service Station *Rahma Zayoud and Habib Hamam*

Tuesday March 22, 2016: 10:30 – 12:30
ROOM 3

Regular Session (RST-A3)	
MEDICAL IMAGES & APPLICATIONS (MIA-S3)	
Chairmen's: Habib ZAIDI (GHU, Switzerland) & Lamia SELLAMI (ATMS, TUN)	
MIA-222	Self-powered Device for Tibiofemoral Force Measurement in Knee Implant *Shaban Almouahed, Chafiaa Hamitouche and Eric Stindel*
MIA-193	Intra-subject multi-slab registration: Application to hippocampal ultra-high resolution imaging at 7T *Linda Marrakchi, Alexandre Vignaud, Julien Sein, Johanne Germain, Thomas R Henry, Cyril Poupon, Lucie Hertz-Pannier, Stéphane Lehéricy, Olivier Colliot, Pierre-François Van de Moortele and Marie Chupin*
MIA-231	The Roberta IRONSIDE project A Humanoid Personal Assistant in a Wheelchair for Dependent Persons *Hugues Sansen, Gérard Chollet, Cornelius Glackin, Atta Badii, Maria Inés Torres, Dijana Petrovska-Delacretaz, Stephan Schlögl and Jérôme Boudy*

MIA-96	Segmentation of Dendritic Cells from Microscopic Images Using Mathematical Morphology *Marwa Braiki,Abdesslam Benzinou,Kamal Nasreddine,Salam Labidi andNolwenn Hymery*
MIA-192	Anisotropy analysis of Textures Using Wavelets Transform and Fractal Dimension *Zehani Soraya, Mimi Malika,Taleb-Ahmed Abdelmalik andToumi Abida*
MIA-144	Deep Random Forest-based Learning Transfer to SVM for Brain Tumor Segmentation *Samya Amiri, Islem Rekik and Mohamed Ali Mahjoub*

Tuesday March 22, 2016: 10:30 – 12:30
ROOM 4

Regular Session (RST-A4)
COMPUTER IMAGES AND VIDEO PROCESSING (IVP-S3)
Chairmen's: Basel SOLAIMAN (Télécom-Bretagne, FRA) & Dijana PETROVSKA-DELACRETAZ (Télécom Paris, FRA)

IVP-89	Comparison between two methods of Facial Emotion Classification : the degree of characterization and percentage of variation *Ahmed Fnaiech, Mounir Sayyadi and Philippe Gorce*
IVP-90	Feature Points Tracking and Emotion Classification *Ahmed Fnaiech, Mounir Sayyadi and Philippe Gorce*
IVP-94	Local Kmeans Clustering and Low-Level Merging Segmentation *Rostom Kachouri, Mahmoud Soua and Mohamed Akil*
IVP-98	Comparative Study of k-means Variants for mono-view clustering *Safa Bettoumi, Chiraz Jlassi and Najet Arous*
IVP-111	Dynamic Reconfigurable Architecture For Adaptive DCT Implementation *Marwa Hannachi, Abdessalem Ben Abdelali, Hassan Rabah and Abdellatif Mtibaa*

Tuesday March 22, 2016: 12:30 – 14:30
LUNCH

Tuesday March 22, 2016: 14:30 – 16:00
ROOM 0

Special Session (SST-B0)
BIG DATA PROCESSING AND INTERNET OF THINGS
Chairmen's : Abdelkerim BOURAMOUL (U. Constantine, ALG) & Imed Riadh FARAH (ISAMM, TUN) & Yahia SLIMANI (ISAMM, TUN)

BDI-39	Towards Large Scale Image Similarity Discovery Model *Hassanin Al-Barhamtoshy*
BDI-59	Patterns-Based Semantic Mashup *Bencherif Khayra and Bensaber Amar Djamel*
BDI-60	Linked Data Enrichment: State–Of-Art *Bencherif Khayra and Malki Mimoun*
BDI-163	Anomaly Detection Through Outlier and Neighborhood Data in Wireless sensor Networks *Aymen Abid, Abdennaceur Kachouri and Adel Mahfoudhi*
BDI-95	Robust and Blind Watermarking Approach Based on Modified Delaunay Triangulation *Dhekra Essaidani, Hassene Seddik and Ezzedine Ben Braiek*

Tuesday March 22, 2016: 14:30 – 16:00
ROOM 1

Regular Session (RST-B1)

CRYPTOGRAPHY, WATERMARKING & STEGANOGRAPHY (CWS-S1)

Chairmen's: Habib HAMAM (U. Moncton, CAN) & Johann VINCENT (Telecom-Bretagne, FRA)

CWS-230	Privacy Protection and Security in eHealth Cloud Platform for Medical Image Sharing *Johann Vincent and Gouenou Coatrieux*
CWS-40	Generating an Hyper-Chaotic System from 3D Chaotic Behavior *Hajer Thabet and Hassene Seddik*
CWS-74	New SMS Encryption Algorithm Based on Hyperchaotic System *Ayadi Wael and Seddik Hassenne*
CWS-77	New Hybrid Encryption Technique Permuting Text and Image Based on Hyperchaotic System *Najm Eddine Maalaoui and Hassen Seddik*
CWS-102	Randomized Poly-Encryption Image Exploiting Hyper-Chaotic Behavior *Hamdi Bouslehi, Hassen Seddik and Ezzdine Ben Braeik*

Tuesday March 22, 2016: 14:30 – 16:00
ROOM 2

Regular Session (RST-B2)

REMOTE SENSING AND ASSIMILATION (RSA-S3)

Chairmen's: Mehrez ZRIBI (CESBIO, FRA) & Abdelaziz KALLEL (ATMS, TUN)

RSA-142	High Spatial Quality MS Image Pansharpening based on Multiresolution Iterative Scheme *Tijani Delleji, Abdelaziz Kallel and Ahmed Ben Hamida*
RSA-213	Target Recognition using IFFT and MUSIC ISAR images *Abdelmalek Toumi and Ali Khenchaf*
RSA-204	Assessment of Inversion Models for Sea Surface Wind Speed Retrieval from Sentinel-1 Data *Tran Vu La, Ali Khenchaf, Carole Nahum and Carole Nahum*
RSA-205	Study of Sensitivity In Wind Direction Retrieval From Sentinel-1 Images *Tran Vu La, Ali Khenchaf, Fabrice Comblet and Carole Nahum*
RSA-206	Estimating Of Water Quality Parameters Using Active And Passive Microwave Remote Sensing *Muntadher A. Shareef, Ali Khenchaf and Abdelmalek Toumi*

Tuesday March 22, 2016: 14:30 – 16:00
ROOM 3

Regular Session (RST-B3)

MEDICAL IMAGES AND APPLICATIONS (MIA-S4)

Chairmen's : Ezzeddine BEN BRAYEK (ENSIT, TUN) & Linda MARRAKCHI (CENIR Paris, FRA)

MIA-174	Investigating Nucleosome Location in Genes by Studying Periodicities 3 and 10 *Rabeb Touati, Imen Massaoudi, Afef Elloumi, Zied Lachiri and Noureddine Ellouze*
MIA-176	Measurement of water transfer changes during hemodialysis cycle *M. Ben Yahia & A. Chiboub, Adnen Rajhi and Amina Kahloul*
MIA-178	Image Segmentation based thresholding technique : application to DNA sequence scalograms *Mael Salah, Afef Elloumi Oueslati and Zied Lachiri*
MIA-180	Vascular Tree Segmentation in MRA Images Using Hessian-Based Multiscale Filtering and Local Entropy Thresholding *Hibet-Allah Ouazaa, Hejer Jlassi and Kamel Hamrouni*

MIA-184	Tandem Repeat Search Tools Performance for the Arabidopsis Thaliana Genome *Soumaya Zribi, Afef Elloumi Oueslati and Zied Lachiri*

Tuesday March 22, 2016: 14:30 – 16:00
ROOM 4

Regular Session (RST-B3)

COMPUTER IMAGES AND VIDEO PROCESSING (IVP-S4)

Chairmen's : Mounir SAMET (ENIS, TUN) & Jihene MALEK (FSM, TUN)

IVP-114	Real-Time Image and Video Processing: Method and Architecture *Lilia Kechiche, Lamjed Touil and Bouraoui Ouni*
IVP-119	Non-Linear Filtering for Landmine Detection on Ground Penetration Radar Data *Khaoula Tbarki, Salma Ben Said and Nourredine Ellouze*
IVP-120	Automated Detection and Tracking of Phlebotominaes *Ahmed Nejmedine Machraoui, Mohamed Fethi Diouani and Mounir Sayadi*
IVP-124	Salient Spectral Features for Points Detection *Habiba Nabi and Ali Douik*
IVP-127	A Comparative Study Applied to Dynamic Textures Segmentation *Hanene Sahli, Lotfi Tlig, Ahmed Zaafouri and Mounir Sayadi*

Tuesday March 22, 2016: 16:00 – 16:30
COFFEE BREAK

Tuesday March 22, 2016: 16:30 – 18:00
ROOM 0

Special Session (SST-C0)

BIG DATA PROCESSING AND INTERNET OF THINGS

Chairmen's: Abdelkerim BOURAMOUL (U. Constantine, ALG) & Imed Riadh FARAH (ISAMM, TUN) & Yahia SLIMANI (ISAMM, TUN)

BDI-158	Big Data Integration: A Semantic Mediation Architecture Using Ontology *Aicha Aggoune, Abdelkrim Bouramoul and Mohamed Khiereddine Kholladi*
BDI-75	Composition of Web Services Using Multi Agent Based Planning with High Availability of Web Services *Mehdi Sabrina and Zarour Nacer Eddine*
BDI-167	Pattern Based Linked Data Knowledge Discovery *Berrahal Soumia, Malki Mimoun and Benchrif Khayra*
BDI-189	An overview of Large Scale Remote Sensing Image Classification Based on Hadoop MapReduce *Imen Chebbi, Wadii Boulila and Imed Riadh Farah*

Tuesday March 22, 2016: 16:30 – 18:00
ROOM 1

Regular Session (RST-C1)

CRYPTOGRAPHY, WATERMARKING AND STEGANOGRAPHY (CWS-S2)

Chairmen's: Johann VINCENT (Telecom-Bretagne, FRA) & Aissa BELMEGUENAI (August 20 Univ., ALG)

CWS-211	Securing Digital Information using the Rakaposhi System *Aissa Belmeguenai, Khaled Mansouri and Salim Ouchtati*
CWS-216	Towards a new Numbering-Combinations-Based coder for Image Compression and Transmission over a noisy channel *Amal Kilani, Achraf Makhloufi, Ahmed Ben Hamida and Habib Hamem*
CWS-104	An efficient DFA scheme for 32-bit AES Algorithm *Noura Ben Hadj-youssef and Mouna Karmani*
CWS-7	Trends in Elliptic Curve Cryptography implementations *Nejmeddine Alimi, Younes Lahbib, Mohsen Machhout and Rached Tourki*
CWS-58	Statistical Robust Watermarking for 3D Mesh Models Based on Salient Points *Nassima Medimegh, Samir Belaid and Naoufel Werghi*

Tuesday March 22, 2016: 16:30 – 18:00

ROOM 2

Regular Session (RST-C2)

REMOTE SENSING AND ASSIMILATION (RSA-S4)

Chairmen's: J. Philippe GASTELLU-ETCHERGORRY (CESBIO, FRA) & Mohamed FARAH (ISAMM, TUN)

RSA-160	States and Parameters Estimation for Biomass Substrate Hypothetical System *Imen Baklouti, Nouha Jaoua, Majdi Mansouri, Mohamed Nounou and Ahmed Ben Hamida*
RSA-215	Design and Architecture of Pico-Satellites network for Earth coverage *Nissen Lazreg and Kamel Besbes*
RSA-227	Fuzzy graph of visual words for semantic annotation of remote sensing images *Mohamed Farah, Khitem Amiri and Imed Riadh Farah*
RSA-233	A New Graph Clustering Approach Based Betweenness Centrality *Manel Ben Salem, Mohamed Salim Bouhlel and Karim Saheb Ettabaa*
RSA-234	Super-Resolution Algorithm Based on Sub-pixels Spatial correlation for Hyperspectral Image Classification *Bouthayna Mselmi, Zouhaier Ben Rabah and Imed Riadh Farah*
RSA-246	Inventory and Characterization of the Meskat System as Runoff Harvesting Practice in Tunisian Sahel *Marwa Fourati, Rajouene Majdoub, Slaheddine Khlifi and Dalenda Boujnah*

Tuesday March 22, 2016: 16:30 – 18:00

ROOM 3

Regular Session (RST-C3)

SIGNAL PROCESSING for COMMUNICATIONS AND NETWORKS (SCN-S3)

Chairmen's: Lotfi KAMOUN (ENIS, TUN) & Sihem CHAABOUNI (ENET'Com, TUN)

SCN-155	Analysis and Performance Evaluation of OFDM-IDMA System Using Chaotic Interleavers Design *Brahim Boukholda*
SCN-177	Numerical Method for Selecting a Protector of the Human Head Against the Electromagnetic Field of Radio Frequency Sources *Lazhar Bouali, Mohammed Djennah, Radhouane Tahmi and Mahrez Zahraoui*
SCN-183	Secret Zeckendorf Number Solution for IP Traceback in Wireless Mesh Networks *Mouna Gassara and Faouzi Zarai*
SCN-188	Joint Delay and Direction of Arrivals Estimation Using MUSIC Algorithm *Nadhem Nemri, Hani Wadie Badri, Ridha Ghayoula, Ali Gharsallah and Hichem Trabelsi*

SCN-201	An Efficient Full-Wave Technique Analysis for Arbitrarily-Shaped Microwave Planar Structures and Based on the Method of Moments *Faouzi Romdhani and Abdelaziz Samet*
SCN-208	New Iterative-Scheduling Algorithm for OFDMA Systems *Messaoud Eljamai, Mahmoud Ammar and Ammar Bouallègue*

Tuesday March 22, 2016: 16:30 – 18:00

ROOM 4

Regular Session (RST-C4)

SPEECH AND AUDIO PROCESSING (SAP-S2)

Chairmen's: Gérard CHOLLET (Télécom Paris, FRA) & Kais OUNI (ENI Carthage, TUN)

SAP-73	Wigner ville representation of voiced speech signal Quasi-Harmonic Model Vs. Sinusoidal Model *Khawla Zammel and Noureddine Ellouze*
SAP-5	An Improved Speech Enhancement Algorithm Based on Wavelets for Mobile Communication *Wahbi Nabi, Noureddine Aloui and Adnane Cherif*
SAP-15	Design of Emotional Educational System Mobile Games for Autistic Children *Nazih Heni and Habib Hamam*
SAP-100	The Comb Filter Integration in CASA System for the Speech Separation *Jihen Zeremdini, Mohamed Anouar Ben Messaoud and Aicha Bouzid*
SAP-103	A new method for pitch smoothing *Wided Jlassi, Aicha Bouzid and Noureddine Ellouze*
SAP-109	Pathological Voices Detection using Support Vector Machine *Imen Hammami, Lotfi Salhi and Labidi Salam*

Tuesday March 22, 2016

PANEL DISCUSSION
18:00-19:00

ROOM 1	**Panel 1 : *RFID technologies: Applications, Trends and Limitations*** **Speaker: Habib HAMAM (U. Moncton, CANADA)** **Chairmen's: Hamadi GHARIANI (ENIS, TUNISIE) & Mongi LAHIANI (ENIS, TUNISIE)**
ROOM 2	**Panel 2: *Assistance Robots or Connected Objects?*** **Speaker: Hugues SANSEN (SHANKAA, Paris, FRANCE)** **Chairmen's: Gérard CHOLLET (Télécom-Paris, FRANCE) & Basel SOLAIMAN (Telecom Bretagne, FRANCE)**
ROOM 3	**Panel 3 : *Functional Medical Imaging*** **Speaker : Habib ZAIDI (Geneva Univ. Hospital, Switzerland)** **Chairmen's: Ahmed BEN HAMIDA (ATMS, TUNISIE) & Nawres KHALIFA (ISTMT, TUNISIE)**

ATSIP'2016 TECHNICAL PROGRAM
Wednesday March 23, 2016

9:00 – 10:00 **ROOM 0**	**PLENARY SESSION** **Chairmen's: Ali KHANCHEF (Télécom Bretagne, FRANCE)** **& Huges SANSEN (SHANKAA, FRANCE) & Najwa ESSOUKRI BEN AMARA (ENISO Tn)** **4th Plenary Session** **" *The Use of Neural Networks in Automatic Speech Processing*"** **by Jean-Paul HATON (Institut Universitaire de France, LORIA – Université de Lorraine, Nancy, France)**
	10:00 – 10:30 **COFFEE BREAK**

Wednesday March 23, 2016 : 10:30 – 12:00
ROOM 0

Special Session (SSW-A0)
FUNCTIONAL MEDICAL IMAGING PROCESSING
Chairmen's: Ahmed BEN HAMIDA (ATMS, TUN) & Habib ZAIDI (Geneva UH, Switzerland)

FMI-122	Segmentation of Low-Grade Gliomas in MRI : Phase-Based Method *Rahima Zaouche, Ahror Belaid, Soraya Aloui, Basel Solaiman, Ahcene Bounceur, Souheil Tliba, Douraied Ben Salem and Seddik Sid-Ahmed*
FMI-161	Influence of Preprocessing Steps on Functional Connectivity in Resting State fMRI *Fatma Gargouri, Sebastien Delfine, Stéphane Lehéricy and Ahmed Ben Hamida*
FMI-212	*Multi-scale and Non Local Mean based filter for Positron Emission Tomography Imaging Denoising* *Hajer Jemaa, Rostom Mabrouk, Frédéric Morain-Nicolier and Nawres Khlifa*
FMI-218	A classification approach to prostate cancer localization in 3T Multi-Parametric MRI *Rania Trigui, Johel Miteran, Lamia Sallemi, Paul Walker and Ahmed Ben Hamida*
FMI-245	A comparative study of motion estimation algorithms in cardiac ultrasound sequences *Saida Khachira, Fathi Kallel and Ahmed Ben Hamida*

Wednesday March 23, 2016 : 10:30 – 12:00
ROOM 1

Special Session (SSW-A1)
OPTICAL REMOTE SENSING SIGNAL MODELING
Chairmen's : Abdelaziz KALLEL (ATMS, TUN) & Jean Philippe GASTELLU-ETCHERGORY (CESBIO, FRA)

ORS-219	Inversion of vegetation canopy reflectance based on variationnel multiscale approach *Sihem Châabouni and Abdelaziz Kallel*
ORS-240	3-D Vector Radiative Transfer for Vegetation Cover Polarized BRDF Modeling *Abdelaziz Kallel and Jean Philippe Gastellu-Etchegorry*
ORS-242	A Remote Sensing Fusion Approach Using MTF-Adjusted Filter Banks *Hind Hallabia, Abdelaziz Kallel and Ahmed Ben Hamida*
ORS-243	Variational multiscale approach to LAI profile inversion based on LiDAR full waveform measurements *Sahar Ben Hmida, Abdelaziz Kallel, Jean-Philippe Gastellu-Etchegorry and Ahmed Ben Hamida*
ORS-247	Modeling specular reflectance and polarization in DART model for simulating remote sensing images of natural and urban landscapes *Jean Philippe Gastellu-Etchegorry, N Lauret, T Yin, J Aval, L Landier, A Kallel, A Al Bitar, J Guilleux, C Jan and E Chavanon*

Wednesday March 23, 2016 : 10:30 – 12:00

ROOM 2

Regular Session (RSW-A2)
COMPUTER IMAGES AND VIDEO PROCESSING (IVP-S5)
Chairmen's : Marie-Christine HATON (Loria, FRA) & Salem RAHMANI (ISTMT, TUN)

IVP-132	Texture Description Using Statistical Feature Extraction *Marouane Ben Haj Ayech and Hamid Amiri*
IVP-133	Software Implementation Of an image Processing Chain on System on Programmable Chip (SOPC) with OpenCV library integration *Marwa Fradi, Wajih Elhadj Youssef and Mohsen Machhout*
IVP-154	Structuring Visual Information for Person Detection in Video:Application to VIDTIMIT database *Makrem Beldi and Zied Lachiri*
IVP-152	Word Script and Nature Identification using Black Run-length based Features *Asma Saidani and Afef Kacem*
IVP-171	ADF Based Anisotropic Diffusion Model Applied to Radiography Image Enhancement *Mohamed Ben Gharsallah and Ezzedine Ben Braiek*

Wednesday March 23, 2016 : 10:30 – 12:00

ROOM 3

Regular Session (RSW-A3)
SPEECH AND AUDIO PROCESSING (SAP-S3)
Chairmen's: Jean Paul HATON (Loria, FRA) & Zaineb BEN MESSAOUD (ATMS, TUN)

SAP-125	Single Channel Speech Separation Based on Sinusoidal Modeling *Wiem Belhedi, Mohamed Anouar Ben Messaoud and Aïcha Bouzid*
SAP-141	Cohort Selection for Text-dependent Speaker Verification Score Normalization *Houssemeddine Khemiri and Dijana Petrovska-Delacrétaz*
SAP-128	Combining ensemble methods of Bagging, Subagging and Random Subspace for phonème recognition *Abir Bousnina, Chiraz Jlassi and Najet Arous*
SAP-129	Dynamic Range Variability of Sound Energy Decay for Reverberation Time Estimation in Railway Noisy Environments *Yosra Mzah and Meriem Jaidane*
SAP-121	Speech Recognition System Based on Short-term Cepstral Parameters, Feature Reduction Method and Artificial Neural Networks

	Nawel Souissi and Adnane Cherif

Wednesday March 23, 2016 : 10:30 – 12:00
ROOM 4

Regular Session (RSW-A4)

MODELING IN SIGNAL AND IMAGES (MSI-S3)

Chairmen's : Lilia AMRAOUI (ENI Carthage, TUN) & Hekmet SAMET (ENIS, TUN)

MSI-26	Generalized Hebbian Algorithm for Fault Detection of CSTR Model *Raoudha Baklouti, Majdi Mansouri, Zaineb Ben Messaoud, Mohamed Nounou and Ahmed Ben Hamida*
MSI-27	Integrate Reasoning using OWL Ontology and SWRL Rules to Online Character Recognition Approach *Houda Nakkach, Sofiene Haboubi, and Hamid Amiri*
MSI-28	A Segmentation-Free Approach to Strokes Extraction from Online Isolated Arabic Handwritten Character *Houda Nakkach, Sofiene Haboubi, and Hamid Amiri*
MSI-115	Visual Intelligent Remote Healthcare Monitoring System using Multi-agent technology *Afef Ben Jemaa, Hela Ltifi and Mounir Ben Ayed*
MSI-196	A combined Approach Based on Fuzzy Classification and Contextual Region Growing To Image Segmentation *Mahaman Sani Chaibou, Karim Kalti, Basel Solaiman and Mohamed Ali Mahjoub*

Wednesday March 23, 2016 : 12:00 – 13:00
LUNCH

Wednesday March 23, 2016 : 13:00 – 18:00

SEA/BOAT EXCURSION

ATSIP'2016 TECHNICAL PROGRAM

Thursday March 24, 2016

9:00 – 10:00 **ROOM 0**	**PLENARY SESSION** **Chairman: Gérard CHOLLET (Télécom-Paris, FRANCE) & Imed Riadh FARAH (ISAMM,TUNISIE) & Marie-Christine HATON (Loria, FRANCE)** **5th Plenary Session:** *" Privacy Preserving Speech Processing in the Cloud "* by **Gerard CHOLLET** (CNRS, ENST-Ecole Nationale Supérieure des Télécommunications, FRANCE)

Thursday March 24, 2016: 10:00 – 10:30 **COFFEE BREAK**

Thursday March 24, 2016: 10:30 – 12:00

ROOM 1

Regular Session (RST-A0)

MEDICAL IMAGES AND APPLICATIONS (MIA-S5)

Chairmen's: Khalil CHTOUROU (CHU Sfax, TUN) & Hatem BESBES (FST, TUN)

MIA-223	Studies of the Segmentation Methods of Cardiac Scintigrafic Images *Yosra Ben Fadhel, Sana Ktata,Tarek Kraiem and Salem Rahmani*
MIA-225	Automated Brain-Tissue Segmentation by parmatric kernel Graph-cuts *Zaineb B. Messaoud, Siwar Chniti and Ines Njeh*
MIA-226	A Spectroscopic Approach Based on Non-negative Matrix Factorization Method for Multispectral Fluorescence Images Unmixing *Sana Lafi, Ali Khalfallah, Med Bouzid, André Bouchot and Med Salim Bouhlel*
MIA-118	Detection of Lumen-Intima Interface Motion of Peripheral artery for Measurement of Elasticity Profile *Olfa Laouini, Fatma Essafi, Luc Bressollette and Ezzedine Ben Braiek*

Thursday March 24, 2016: 10:30 – 12:00

ROOM 2

Regular Session (RSW-A1)

CRYPTOGRAPHY, WATERMARKING AND STEGANOGRAPHY (CWS-S3)

Chairmen's: Achraf MAKHLOUFI (ATMS, TUN) & Mohamed FARAH (ISAMM, TUN)

CWS-214	Software Application for AES, RSA and Elliptic Curves Algorithms Simulation Based *Asma Chaouch, Belgacem Bouallegue and Bouraoui Ouni*
CWS-229	Quantitative Evaluation of Chaotic CBC Mode of Operation *Abdessalem Abidi, Qianxue Wang, Belgacem Bouallegue, Mohsen Machhout and Christophe Guyeux*
CWS-38	Image encryption with the AES algorithm in wireless sensor network *Amina Msolli, Abdelhamid Helali and Hassen Maaref*

	Thursday March 24, 2016: 10:30 – 12:00
	ROOM 3
	Regular Session (RSW-A2)
	COMPUTER IMAGES AND VIDEO PROCESSING (IVP-S6)
	Chairmen's : Ali DOUIK (ENISO, TUN) & Imed Riadh FARAH (ISAMM,TUN)
IVP-179	Reduction of impulsive noise in color image using an Adaptive Vector Distance Directional Filter *Imen Abid, Anis Boudabous and Ahmed Ben Atitallah*
IVP-191	Contribution to the Fusion of Soft Facial and Body Biometrics for Remote People Identification *Asma El Kissi, Riwa Ben Slamia and Najoua Essoukri Ben Amara*
IVP-202	Data, Protocol and Algorithms for Performance Evaluation of text detection in Arabic news Video *Oussama Zayene, Sameh Masmoudi Touj, Jean Hennbert, Rolf Ingold and Najoua Essoukri Ben amara*
IVP-236	An Optimized Hardware Architecture of 4×4, 8×8, 16×16 AND 32×32 Iinverse Transform for HEV *Manel Kammoun, Emna Maamouri, Ahmed Ben Atitallah and Nouri Masmoudi*
	Thursday March 24, 2016: 10:30 – 12:00
	ROOM 4
	Regular Session (RSW-A3)
	MODELING IN SIGNAL AND IMAGES (MSI-S4)
	Chairmen's: Ezzeddine BEN BRAYEK (ENSIT, TUN) & Salem RAHMANI (ISTMT, TUN)
MSI-162	Integrating EMD Attributes for Person Identification from Electrocardiographic Signals *Dhouha Rezgui and Zied Lachiri*
MSI-182	Keystroke Template Update with Adapted Threshold *Abir Mhenni, Estelle Cherrier, Christophe Rosenberger and Najoua Essoukri Ben Amara*
MSI-37	Design and Visio Control of Two-Wheeled Inverted Pendulum Mobile Robot *Mohamed Sabri Ben Mansour, Jawhar Ghommam and Mohamed Saber Naceur*
MSI-238	Multimodal biometric recognition based on the fusion: fingerprint, face and voice *Mofdi Dhouib, Sabeur Masmoudi and Ahmed Ben Hamida*
MSI-21	Intelligent Induction Motor diagnosis system: A new challenge *Slah Eddine Zgarni and Ahmed Braham*

12:00 – 13:00

CONFERENCE CLOSING CEREMONY