

3rdIEEE INTERNATIONAL CONFERENCE on ADVANCEDTECHNOLOGIES

FOR SIGNAL AND IMAGE PROCESSING

ATSIP'2017

May 22-24, 2017, Fez, MOROCCO

Detailed Program

Start	End						
Monday, May 22, 2017							
9:00	18:00		Welcome and Registration (Hall)				
9:30	10:00		Opening Ceremony (Conference center)				
10:00	10:45		Keynote Speaker 1 : Habib Benali Apports conjoints de la neuroimagerie et de la modélisation au diagnostic précoce de la maladie d'Alzheimer (Conference center) Chair: Basel Solaiman				
10:45	11:15		Coffee break				
11:15	12:00		Keynote Speaker 2 : Driss Boussaoud Neuro-Technologies : from neurons to brain-machine interface (Conference center) Chair: Said Boujraf				
12:00	14:00		Lunch				
14:00	14:45		Keynote Speaker 3 : Gérard Chollet Privacy Preserving Speech Processing (Conference center) Chair: Jamal Kharroubi				
15:00	16:30		Session SSIP I Speech, Signal and Image Processing (Conference center)	Special Session 3DHTAR 3D Human Tracking and Activity Recognition (Room I)	Special Session MDAS Multimedia Data Analysis and Security (Room II)		
16:30	17:00		Coffee break				
16:30	17:30		Poster Session I (Hall)				
17:30	18:30		Round Table I : Neuro-Imagerie Habib Benali & Driss Boussaoud (Conference center) Chairs: Imed Riadh FARAH & Khalil CHTOUROU				

Start	End						
Tuesday, May 23, 2017							
9:00	18:00		Registration (Hall)				
9:00	09:45		Keynote Speaker 4 : Mohamed Kayyali NanoSat the future of Space & Applications (Conference center) Chair: Tajjeeddine Rachidi				
9:45	10:30		Keynote Speaker 5 : Tajjeeddine Rachidi Nano-satellites (Conference center) Chair: Mohammed KARIM				
10:30	11:00		Session SSIP II		ee break	Cossion BCA I	
11:00	12:30		Speech, Signal and Image Processing (Conference center)	Session ESA I Embedded systems and applications (Room I)	Session MIA I Medical images and applications (Room II)	Session RSA I Remote sensing and assimilation (Room III)	
12:30	14:00		Lunch				
14:00	14:45		Keynote Speaker 6 : Bernd Grambow Nuclear Physics, Radiochemistry and Radioisotope Production : an Interdisciplinary Endeavor for Imaging in Nuclear Medicine (Conference center) Chair: Jaouad Tajmouati				
15:00	16:30		Session SSIP III Speech, Signal and Image Processing (Conference center)	Session ESA II Embedded systems and applications (Room I)	Session MIA II Medical images and applications (Room II)	Session RSA II Remote sensing and assimilation (Room III)	
16:30	17:00		Coffee break				
16:30	17:30		Poster Session II (Hall)				
17:30	18:30		Round Table II : Techniques Avancées en Imagerie Dijana Petrovska & Ali Boudjedra & Aladine Chetouani (Conference center) Chairs : Mohamed Ben Slima & Habib Benali				
18:30	19:30		Executive committee meeting				

Start	End						
Wednesday, May24, 2017							
9:00	12:00	Tutorial: Mohamed Sahmoudi Global Satellites Navigation Systems (GNSS): Science, technologies and applications (Room I)					
9:00	10:30	Session SSIP IV Speech, Signal and Image Processing (Conference center)	Special Session MLMI Machine Learning in Medical Imaging (Room II)	Special Session WSN Wireless Sensor Networks: Energy Consumption Management Studies (Room III)			
10:30	11:00	Coffee break					
10:30	12:00		Poster Session III (Hall)				
12:00	12:30	Closing Session (Conference center)					
12:30	14:00	Lunch					
14:30	17:00	Social event (Fez city tour)					

Monday May 22, 2017 (15:00-16:30)

SSIP I- Speech, Signal and Image Processing I

Location: Conference center

Chairs: Gérard Chollet and Ahmed Ben Hamida

- **9** Amine Brahmi, Hicham Ghennioui, Christophe Corbier, M'Hammed Lahbabi and François Guillet, "A semi-analytical method for blind separation of cyclostationary sources in digital communications"
- **18** Tarek Frikha, Faten Chaabane, Said Boukhchim and Hassen Drira, "Embedded approach for a Riemannian-based framework of analyzing 3D faces"
- **175** Lahcen El Bouny, Mohammed Khalil and Abdellah Adib, "ECG Signal Denoising Based on Ensemble EMD thresholding and higher order statistics"
- **189** Marwa Chaabane, Majdi Mansouri, Hazem Nounou, Mohamed Ben Slima, Ahmed Ben Hamida and Mohamed Nounou, "Damage Detection in Structural Health Monitoring using kernel PLS based GLR"
- **203** Ghlaifan Abdulatef, Yassine Tounsi and Abdelkrim Nassim, "Two dimensional discrete wavelets transform for optical phase gradient extraction in interferometry shearing"
- **212** Atta Badii, Ryan Faulkner, Rajkumar Raval, Cornelius Glackin, Gérard Chollet, "Accelerated Encryption Algorithms for Secure Storage and Processing in the Cloud"

3DHTAR- 3D Human Tracking and Activity Recognition

Location: Room I

Chairs: Arsalane Zarghili and Boubakeur Boufama

- **41** Aliyu Nuhu Shuaibu, Aamir Saeed Malik, Ibrahim Faye and Yasir Salih Ali, "Pedestrian Group Attributes Detection in Crowded Scenes"
- **62** Hiba Ramadan and Hamid Tairi, "Boundary connectedness based video cut for moving object segmentation"
- **84** Malek Boujebli, Hassen Drira, Makram Mestiri and Imed Riadh Farah, "Rate Invariant Action Recognition in Lie Algebra"
- **115** Sameh Neili, Sami Gazzah, Mounim A. El Yacoubi and Najoua Essoukri Ben Amara, "Human Posture Recognition Approach based on ConvNets and SVM classifier"
- **125** Driss Moujahid, Omar El Harrouss and Hamid Tairi, "Visual Tracking of a Moving Object via the Soft Cosine Measure"
- **153** Zeineb Nejim, Makram Mestiri and Hamid Amiri, "Use of ropes histograms as joints trajectories representation for human motion recognition"

MDAS- Special session on Multimedia Data Analysis and Security

Location: Room II

Chairs: Omar El Beggali and Rachid Jennane

- **69** Hana Ouazzane, Hela Mahersia and Kamel Hamrouni, "Blind Lossless Medical Image Watermarking in the DOST Domain Using Difference Expansion"
- **94** Abdelghafour Abbad, Khalid Abbad and Hamid Tairi, "An efficient post-processing approach for dimensionality reduction methods for face recognition"
- **110** Imène Khanfir Kallel, Sonda Ammar Bouhamed and Belhassen Akrout, "Clever use of Meyer wavelet for iris recognition"
- **140** Mohamed Hamidi, Mohamed El Haziti, Hocine Cherifi and Driss Aboutajdine, "A Robust Blind 3-D Mesh Watermarking based on Wavelet Transform for Copyright Protection"
- **162** Wafae Mrabti, Driss Moujahid, Benaissa Bellach and Hamid Tairi, "Approach for tracking human being in surveillance videos"

Monday May 22, 2017 (16:30-17:30)

Poster Session I

Location: Hall

- **3** Leila Kerkeni, Youssef Serrestou, Mohamed Mbarki, Kosai Raoof and Mohamed Ali Mahjoub, "A Review on Speech Emotion Recognition: Case of Pedagogical Interaction in Classroom"
- **5** Meriem Hacini, Akram Hacini, Fella Hachouf and Herman Akdag, "A 2D- Fractional-Order Derivative Mask for Image Edge Detection"
- **14** Aissa Belmeguenai, Zahir Ahmida and Rafik Djemili, "A new Approach for the Secure Transfert of Speech Data"
- **35** Ahmed Tahraoui, Radja Kheddam, Abdenour Bouakache and Aichouche Belhadj Aissa, "Affinity Propagation for Unsupervised Classification of Remotely Sensed Images"
- **38** Hicham Karmouni, Tarik Jahid, Imad El Affar, Mhamed Sayyouri, Abdeslam Hmimid, Hassan Qjidaa and Abdellah Rezzouk, "Image Analysis Using Separable Krawtchouk-Tchebichef's moments"
- **54** Bilel Ameur, Mebarka Belahcene, Sabeur Masmoudi, Amira Guidara Derbel and Ahmed Ben Hamida, "A new GLBSIF Descriptor for Face Recognition in the Uncontrolled Environments"
- **59** Feriel Boudamous, Hassiba Nemmour, Yasmine Serdouk and Youcef Chibani, "An-Open System for Off-line Handwritten Signature Identification and Verification using Histogram of Templates and SVM"
- 156 Benoraira Ali, "Blind Video Watermarking Method based on the DCT transform"
- **167** Hinda Dridi and Kais Ouni, "HYBRID CONTEXT DEPENDENT CD-DNN-HMM KEYWORDS SPOTTING ON CONTINUOUS SPEECH"

- Dalila Hammoumi, "Speed control wind energie system based on the permanent magnet synchronous generator"
- Hanen Chenini, "Pipelined Architecture for Real Time Detection and Tracking of Moving Objects on an Hybrid Device"
- Kalthoum Ouerghi, Amor Smida, Ridha Ghayoula and Noureddine Boulejfene, "Design and Analysis of a Microstrip Antenna Array for Biomedical Applications"
- Abdelbasset Brahim, Laila Khedher, Juan Manuel Gorriz, Javier Ramirez, Mohammed El Hassouni, Hechmi Toumi, Eric Lespessailles and Rachid Jennane, "A Proposed Computer-Aided Diagnosis System for Parkinson's Disease Classification using 123I-FP-CIT Imaging"
- J.C. Cexus, A. Toumi and O. Couderc, "Quantitative measures in ISAR image formation based on Time-Frequency Representations"
- AyoubKarine, Abdelmalek Toumi, Ali Khenchaf and Mohammed El Hassouni, "Saliency Attention and SIFT Keypoints Combination for Automatic Target Recognition on MSTAR dataset"
- Aya Ayadi, Oussama Ghorbel and Mohamed Abid, "Leak Detection in Water Pipes by Means of Pressure Measurements"

Tuesday May 23, 2017(11:00-12:30)

SSIP II- Speech, Signal and Image Processing II

Location: Conference center

Chairs: Chakib El Bekkali and Ahmed Dadouch

- Adnane Ouazzani Chahdi, Anouar Ragragui, Akram Halli and Khalid Satori, "Per-Pixel Displacement Mapping Using Hybrid Cone Approch"
- Abdelkader Elhanaoui, El Houcein Aassif, Gérard Maze and Dominique Décultot, "Usefulness of Time-frequency Treatment to an Acoustic Signal"
- Sara Sekkate, Mohammed Khalil and Abdellah Adib, "Speaker identification: A way to reduce call-sign confusion events"
- Imen Baklouti, Majdi Mansouri, Ahmed Ben Hamida, Hazem Nounou and Mohamed Nounou, "Fault Detection in a Wastewater Treatment Plant"
- Oumaima Zine and Abdelouafi Meziane, "Novel approach for quality enhancement of Arabic Text To Speech synthesis"
- **186** Afafe Annich, Abdellatif El Abderrahmani and Khalid Satori, "Fast and efficient geometric constraints optimization for an automatic 3D modelling"
- Imad Lamouik, Ali Yahyaouy and My Abdelouahed Sabri, "Smart multi-agent intersection traffic coordinator for autonomous vehicles"

ESA I- Embedded systems and applications I

Location: Room I

Chairs: Tajjeeddine Rachidi and Mohamed Ghorbel

- **11** Ahmed Hanafi, Mohammed Karim, Ibtissam Latachi, Tajjeeddine Rachidi, Zouggar Smail and Sanae Dahbi, "FPGA-based Secondary On-Board Computer System for Low-Earth-Orbit Nano-satellite"
- **17** Bo Zhang, Loïc Sieler, Yann Morère, Benoît Bolmont and Guy Bourhis, "Dedicated wavelet QRS complex detection for FPGA implementation"
- **21** Ibtissam Latachi, Tajjeeddine Rachidi, Mohammed Karim, Ahmed Hanafi, Sana eDahbi, Smail Zouggar, Ahmed Khalayoun and Naser Assem, "Link Budget Analysis for a Leo CubeSat Communication Subsystem"
- **36** Sanae Dahbi, Aziz Abdelhak, Smail Zouggar, Mohamed El Hafyani, Mohammed Karim, Ahmed Hanafi, Ibtissam Latachi and Tajje-Eddine Rachidi, "Power Budget Analysis for a LEO polar orbiting Nanosatellite"
- **158** Ahmed Hanafi, El-Kaber Hachem, Mohammed Karim and Tajjeeddine Rachidi, "Perturbation Effects in Orbital elements of CubeSats"
- **166** Abdellah El Kamili, Abdelwahed Tribak, Jaouad Terhzaz and Angel Mediavilla, "Design and Simulation of a Multiband OrthomodeTransducer in k/Ka Band for Satellite Communications"

MIA I- Medical images and applications I

Location: Room II

Chair: Mohammed El Abkari and Imane Toughrai

- **51** Said Charfi and Mohamed El Ansari, "Computer-aided diagnosis system for ulcer detection in wireless capsule endoscopy videos"
- **73** Souaidi Meryem, Ait Abdelouahad Abdelkaher and El Ansari Mohamed, "A fully automated ulcer detection system for wireless capsule endoscopy images"
- **87** Wael Brahim, Makram Mestiri, Nacim Betrouni and Kamel Hamrouni, "Malignant Pleural Mesothelioma Segmentation From Thoracic CT scans"
- 98 Osama Dorgham, "Automatic Body Segmentation from Computed Tomography Image"
- **141** Amel Feroui, Mahammed Messadi, Amine Lazouni, Isma hen Hadjidj and Abdelhafid Bessaid, "Micro-Aneurysms Detection for Computer-Aided Screening of Diabetic Retinopathy"
- **183**Soumaya Zribi, Imen Messaoudi, Afef Elloumi Oueslati and Zied Lachiri, "Identification of Microsatellites in DNA sequence Based on S-Transform"

RSA I- Remote sensing and assimilation I

Location: Room III

Chairs: Asmae Benchegroune and Abdelmalek Toumi

- **28** Abdenour Bouakache, Ahmed Tahraoui, Radja Kheddam and Aichouche Belhadj Aissa, "Change Detection Approach Using Evidential Fusion of Change Indices"
- **32** Adnane Habib, Jose Manuel Delgado Blasco, Freek van Leijen, Lorenzo Iannini, Kamal Labbassi and Massimo Menenti, "Land Deformation Monitoring Using PS-InSAR Technique Over Sahel-Doukkala (Morocco)"
- **64** Tbarki Khaoula, Ben Said Salma, Ksantin iRiadh and Lachiri Zied, "Landmine detection Improvement Using One-Class SVM for Unbalanced Data"
- **105** Oumayma Bounouh, Houcine Essid and Imed Riadh Farah, "Prediction of Land Use/Land Cover Change methods: A Study"
- **194** Ahmed Fouad El Ouafdi and Hassan El Houari, "A new opeator for corner detection in multispectral images"

Tuesday May 23, 2017(15:00-16:30)

SSIP III- Speech, Signal and Image Processing III

Location: Conference center

Chairs: Hamid Tairi and Mohamed Ben Slima

- **39** Hachad Lamiae, Cherrak Omar, Hicham Ghennioui, Fatiha Mrabti and Mouhcine Zouak, "DOA Estimation Based on Time-Frequency MUSIC: Application to Massive MIMO Systems"
- **60** Mohamed Lamine Bouibed, Hassiba Nemmour and Youcef Chibani, "New Gradient Descriptors for Keyword Spotting in Handwritten Documents"
- **81** Rabeb Touati, Imen Messaoudi, Afef Elloumi Oueslati and Zied Lachiri, "SVM Helitrons recognition based on features extracted from the FCGS representation"
- **113** Khadija Lekdioui, Yassine Ruichek, Rochdi Messoussi, Chaabi Youness and Raja Touahni, "Facial Expression Recognition Using Face-Regions"
- **126** Hanane Arahmane, El-Mehdi Hamzaoui and Rajaa Cherkaoui El Moursli, "Characterization of the fission chamber output signal using non-negative matrix factorization"
- **159** Amine Amraoui, Mounir Ait Kerroum and Youssef Fakhri, "Unimodal Palmprint Recognition System Based on Local Features"
- 179 Ayoub Ellahyani and Mohamed El Ansari, "A new designed descriptor for road sign recognition"

ESA II- Embedded systems and applications II

Location: Room I

Chair: Aziz Derouich and Tarek Frikha

- **48** Youness Elmourabit, Othmane Zamzoum, Aziz Derouich and Abdelaziz Elghzizal, "Dynamic modeling and control of a wind turbine with MPPT method connected to the grid by using PMSG"
- **55** Mohammed Taoussi, Mohammed Karim, Dalila Hammoumi, Chakib El Bekkali, Badre Bossoufi and Najib El Ouanjli, "Comparative study between Back stepping adaptive and Field-oriented control of the DFIG applied to wind turbines"
- **88** Zineb M'Harzi, Mustapha Alami and Farid Temcamani, "Novel Current-Controlled Negative Resistance based on Simplified Negative Current-Controlled Conveyors"
- **93** Hala Alami Aroussi, Elmostafa Ziani and Badre Bossoufi, "Contribution to the enhancement of dual DTC Application: Doubly fed induction motor"
- **145** Nada Zine Laabidine, Mohammed Karim and Badre Bossoufi, "MPPT Algorithm control for Grid Connected PV Module"
- **192** Nader Ben Amor, Khaled Lahbib and Tarek Frikha, "Design of a dynamically reconfigurable architecture for the 3D image synthesis"

MIA II- Medical images and applications II

Location: Room II

Chair: Said Boujraf and Mustapha Maaroufi

- **172** Rafik Khemakhem, Jihene Boughariou, Ines Kammoun, Mohamed Ghorbel, Khalil Chtourou and Ahmed Ben Hamida, "EEG localization error exploration vs distance between sources"
- **200** Imene Khanfir Kallel and Basel Solaiman, "Contextual Possibilistic Modeling Of Pixellic Knowledge For Tumor Segmentation In Mammographic Images"
- **204** Laetitia Jeancolas, Habib Benali, Badr-Eddine Benkelfat, Graziella Mangone, Jean-Christophe Corvol, Marie Vidailhet, Stéphane Lehéricy and Dijana Petrovska-Delacrétaz, "Automatic Detection of Early stages of Parkinson's Disease throw Acoustic Voice Analysis with Mel-Frequency Cepstral Coefficients"
- **205** Halima El Hamdaoui, Said Boujraf, Mustapha Maaroufi, Nour El Houda Chaoui and Badreddine Alami, "Computer-Aided Diagnosis Systems for Detecting Intracranial Aneurysms Using 3D Angiographic Data Sets: Review"
- **206** Imane Assini, Abdelmajid Badri, Khadija Safi, Aicha Sahel and Abdennaceur Baghdad, "Hybrid multiple watermarking technique for securing medical image using DWT-FWHT-SVD"

RSA II- Remote sensing and assimilation II

Location: Room III

Chair: Ali Khenchaf and Mohamed Farah

- **106** Tran Vu La, Ali Khenchaf, Fabrice Comblet and Carole Nahum, "Overview of Surface Wind Speed Retrieval from C-Band SAR Images: Empirical and Electromagnetic Approaches"
- **111** Khitem Amiri, Mohamed Farah and Imed Riadh Farah, "Fuzzy Hypergraph of Concepts for Semantic Annotation of Remotely Sensed Images"
- 149 Elmansouri Loubna, "Multiple Classifier Combination for crop types phenology based mapping"
- **181** Asma Elmaizi, Maria Merzouqi, Elkebir Sarhrouni, Ahmed Hammouch and Chafik Nacir, "Hybridization of filter and wrapper approaches for the dimensionality reduction and classification of hyperspectral images"
- **197** Hanan Anzid, Gaetan Le Goic, Aissam Bekkari, Alamin Mansouri and Driss Mammass, "A new SURF-based algorithm for remote sensing images registration"

Tuesday May 23, 2017(16:30-17:30)

Poster session II

Location: Hall

- **120** Nabil Aharrane, Abdellatif Dahmouni, Karim El Moutaouakil and Khalid Satori, "End-to-end system for printed Amazigh script recognition in document images"
- **108** Raoudha Baklouti, Majdi Mansouri, Hazem Nounou, Mohamed Ben Slima, Ahmed Ben Hamida and Mohamed Nounou, "Fault Detection of Chemical Processes using KPCA-based GLRT Technique"
- 142 Amel Korti and Abdelhafid Bessaid, "Wavelet regularization in parallel imaging"
- 148 Ezzine Kadria and Frikha Mondher, "A Comparative Study of Voice Conversion Techniques: A review"
- **16** Boubakeur Boufama, Pejman Habashi and Imran Shafiq Ahmad, "Trajectory-Based Human Activity Recognition from Videos"
- **70** Ismaili Alaoui El Mehdi and Ibn Elhaj Elhassane, "Motion estimation from noisy image sequences using new frequency weighting functions"
- **185** Salwa Lagdali and Mohammed Rziza, "Higher order spectra in image processing"
- **199** Er-Rady Adil, Oulad Haj Thami Rachid, Faiz Rdouan and Housni Hamid, "Automatic Sign Language Recognition: A Survey"

Wednesday May 24, 2017(09:00-10:30)

SSIP IV- Speech, Signal and Image Processing IV

Location: Conference center

Chairs: Mohammed El Hassouni and Aicha Majda

- **79** Attallah Bilal, Serir Amina, Chahir Youssef and Boudjelal Abdelwahhab, "Application of BSIF, Log-Gabor and mRMR Transforms for Iris- and Palmprint-based Bi-modal Identification System"
- **150** Aladine Chetouani, "A FUSION-BASED BLIND IMAGE QUALITY METRIC FOR BLURRED STEREOSCOPIC IMAGES"
- **163** Sara Belmil and Mohammed Abdelfattah Cherif Chefchaouni, "Spatially-Variant Mathematical Morphology for Color Images"
- **190** Hdioud Boutaina, Oulad Haj Thami Rachid and El Haj Tirari Mohammed, "People Detection in Complex Scenes By Using An Improved and Robust HOG Descriptor"
- **196** Jihad H'Roura, Alamin Mansouri, Michaël Roy, Aissam Bekkari, Gaëtan Le Goïc, Driss Mammass and Ali Bouzit, "3D objects recognition methods: Overview and trends"
- **202**Yassine Tounsi, Ahmed Siari and Abdelkrim Nassim, "Speckle noise reduction in digital speckle pattern interferometry using Riesz wavelets transform"

MLMI- Special session on Machine Learning in Medical Imaging

Location: Room II

Chairs: François Rousseau and Lamia Sellami

- **20** Ibtissam Bakkouri and Karim Afdel, "Breast Tumor Classification Based on Deep Convolutional Neural Networks"
- **53** Abdelouahab Attia, Abdelouahab Moussaoui, Youssef Chahir and Mourad Chaa, "An efficient Classification of Epileptic seizures using autoregressive model Based on Deep Learning and SVM"
- **116** Noureddine Ait Ali, Bouchaib Cherradi, Ahmed El Abbassi, Omar Bouattane and Mohamed Youssfi, "New Parallel Hybrid Implementations of Bias Correction Fuzzy C-means Algorithm"
- **161** Yassine Nasser, Mohammed El Hassouni, Abdelbasset Brahim, Hechmi Toumi, Eric Lespessailles and Rachid Jennane, "Diagnosis of osteoporosis disease from bone X-ray images with Stacked Sparse Autoencoder and SVM classifier"
- **155** Khaoula Belhaj Soulami, Mohamed Nabil Saidi and Ahmed Tamtaoui, "A CAD system for the detection and classification of abnormalities in dense mammograms using Electromagnetism-like optimization algorithm"
- **174** Youssef Filali, Assia Ennouni, My Abdelouahed Sabri and Abdellah Aarab, "Multiscale approach for skin lesion analysis and classification"

WSN- Special session on Wireless Sensor Networks: Energy Consumption Management Studies

Location: Room III

Chair: Ouadoudi Zytoune and El Houssaine Tissir

- **23** Ouarda Lamrabet, Nabil El Fezazi, Fatima El Haoussi and El Houssaine Tissir, "Using Input Delay Approach for Synthesizing an Anti-windup Compensator to AQM in TCP/IP Networks"
- 46 Iman Zubeiri, "A comparative study of interworking methods among differents RATs in 5G context"
- **47** Yasmina El Morabit, Fatiha Mrabti and El Hossein Abarkan, "Small Cell Switch Off Using Genetic Algorithm"
- **66** Oussama Ghorbel, Aya Ayadi, Kais Loukil and Mohamed Abid, "Classification Data using Outlier Detection method in Wireless Sensor Networks"
- **151** Khadija Naamane, Redouane Chaibi, El Houssaine Tissir and Abdelaziz Hmamed, "Stabilization Of Discrete-time T-S Fuzzy Systems With Saturating Actuators"
- **193** Mohammed Assaouy, Ouadoudi Zytoune and Driss Aboutajdine, "Policy iteration vs Q-Sarsa Approach Optimization for Embedded System Communications with Energy Harvesting"
- **207** Umber Noreen, Ahcène Bounceur and Laurent Clavier, "A Study of LoRa Low Power and Wide Area Network Technology"

Wednesday May 24, 2017 (10:30-12:00)

Poster session III

Location: Hall

- **4** Soukaina El Idrissi El Kaitouni, Abdelghafour Abbad and Hamid Tairi, "Tumor extraction and elimination of pectoral muscle based on hidden Markov and region growing: applied based MIAS"
- **169** Kaoutar Baibai, Naoufal Elfakhouri and Benaissa Bellach, "3D Acquisition System for 3D Forms Recognition"
- 176 Sawsan Rekik and Amiri Hamid, "Hybrid system for classifying ECG signals"
- **52** Olfa Laouini, Safouane Hamdi and Ezeddine Ben Brayek, "Computer Aided Diagnosis for Parkinson's disease detection: State-of-the-Art"
- **102** Bouchra Ait Hssaine, Jamal Ezzahar, Lionel Jarlan, Olivier Merlin, Said Khabba, Aurore Brut, Salah Er-Raki, Bernard Cappelaere and Ghani Chehbouni, "Regional estimation of turbulent fluxes at the surface atmosphere interface using in-situ measurements, and aggregation scheme"
- **89** Omar Aboufellah, Achraf Benba, Abdelilah Jilbab and Ahmed Hammouch, "Detecting Parkinson's disease using cepstral analysis along with 5 different classifiers"

- Imad Iala, Mourad Ouadou, Ouadoudi Zytoune and Driss Aboutajdine, "Energy based Collision Avoidance at the MAC layer for Wireless Sensor Network"
- Kacem Halim, "Generation of Low Cost and Low Power Random Number Generation for Wireless Sensor Networks Application"
- Ibrahim Abdelkader, Yasser El-Sonbaty and Mohamed El-Habrouk, "A Survey of Wireless Sensor Networks Operating Systems"