

2018 International Conference on Signal, Image, Vision and their Applications (SIVA 2018)

**Guelma, Algeria
26-27 November 2018**



**IEEE Catalog Number: CFP18Q75-POD
ISBN: 978-1-5386-7121-4**

**Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18Q75-POD
ISBN (Print-On-Demand):	978-1-5386-7121-4
ISBN (Online):	978-1-5386-7120-7

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

FILTERING IMPACTS ON NONLINEAR HEART RATE VARIABILITY PARAMETERS	1
<i>Dib Nabil ; Benali Radhwane ; Bereksi Reguig Fethi ; Omari Tahar</i>	
ROBUST SVSF-SLAM ALGORITHM FOR UNMANNED VEHICLE IN DYNAMIC ENVIRONMENT	7
<i>Fethi Demim ; Abdelkrim Nemra ; Abdelghani Boucheloukh ; Kahina Louadj ; Mustapha Hamerlain ; Abdelouahab Bazoula</i>	
FUSION OF HYPERSPECTRAL, MULTISPECTRAL, AND PANCHROMATIC DATA BASED ON SPECTRAL UNMIXING.....	12
<i>Mohamed Amine Bendoumi ; Tarek Benlefk</i>	
A COMPARATIVE ANALYSIS BETWEEN AN HYBRID MUSIC-LS ALGORITHM AND THE STANDARD MUSIC FOR VOLUME HEIGHT ESTIMATION IN TOMOGRAPHY-SAR.....	17
<i>H. Mahgoun ; M. Ouarzeddine ; N.H. Chaffa</i>	
NEW TWO CHANNEL SET-MEMBERSHIP PARTIAL-UPDATE NLMS ALGORITHMS FOR ACOUSTIC NOISE REDUCTION.....	23
<i>Abdelhak Cheffi ; Mohamed Djendi</i>	
EVALUATION OF QOS FOR A VIDEO STREAM IN A 3G MOBILE NETWORK (UMTS).....	28
<i>Khaled Merit ; Mohammed Beladgham ; Abdelmalik Taleb-Ahmed ; Ahmed Bouda</i>	
DESIGN AND FPGA IMPLEMENTATION OF RESIDUAL DATA IN HEVC CABAC ENCODER	33
<i>Menasri Wahiba ; Skoudarli Abdellah ; Mohamed Salah Azzaz ; Belhadj Aichouche</i>	
ENHANCED BCS WAVEFORMS FOR GNSS APPLICATIONS.....	38
<i>Salem Titouni ; Khaled Rouabah ; Salim Atia ; Mustapha Flissi</i>	
EXTRACTION OF THE RELATIVE SENSITIVITY MODEL AND IMPROVEMENT OF THE PIEZOELECTRIC ACCELEROMETER PERFORMANCES.....	44
<i>Salima Khaoula Reguieg ; Zine Ghemari ; Tarak Benslimane</i>	
RECOGNITION OF HANDWRITTEN DIGITS USING NEURO-MARKOVIAN TECHNIQUE	49
<i>Mehdi Boukrouh ; Mohamed Lashab ; Ahcen Goutas ; Salim Ouchtati</i>	
SOFTWARE DEFINED RADIO IMPLEMENTATION OF CA-COOK MODULATION.....	54
<i>H. Benimam ; D. Teguig ; I. Behloul ; M. S. Azzaz ; S. Sadoudi ; A. Mesloub</i>	
KINSHIP VERIFICATION USING BSIF AND LBP	59
<i>Abdelhakim Chergui ; Salim Ouchtati ; Jean Sequeira ; Salah Eddine Bekhouche ; Fares Bougourzi</i>	
A COMPARATIVE STUDY OF CONVOLUTIONAL NEURAL NETWORK AND TWIN SVM FOR AUTOMATIC GLAUCOMA DIAGNOSIS	64
<i>Radia Touahri ; Nabih Aziz ; Nacer Eddine Benzebouchi ; Nacer Eddine Hammami ; Ouided Moumene</i>	
TEXT-INDEPENDENT SPEAKER IDENTIFICATION BY COMBINING MFCC AND MVA FEATURES.....	69
<i>Mohamed Cherif Amara Korba ; Houcine Bourouba ; Djemili Rafik</i>	
ABNORMAL BRAIN DETECTION AND ANALYSIS OF EEG SIGNALS	74
<i>Manel Yakoubi ; Rachid Hamdi ; Mounir Bousbia Salah</i>	
RIGID IMAGE REGISTRATION USING MUTUAL INFORMATION AND WAVELET TRANSFORM	79
<i>Sabri Halheit ; Souad Benabdelkader</i>	
ROBUST VOICE ACTIVITY DETECTION AGAINST NON HOMOGENEOUS NOISY ENVIRONMENTS	85
<i>Charaf Eddine Chelloug ; Atef Farrouki</i>	
DYSARTHIC SPEAKER IDENTIFICATION WITH CONSTRAINED TRAINING DURATIONS.....	91
<i>Mounira Chaiani ; Messaoud Bengherabi ; Sid Ahmed Selouani ; Malika Boudraa</i>	
HOG AND HOF SPATIO-TEMPORAL DESCRIPTORS FOR GESTURE RECOGNITION.....	97
<i>Salah Eddine Agab ; Fatma Zohra Chelali</i>	
SECURING PERSON IDENTIFICATION BY COMBINING HAND BIOMETRIC MODALITIES.....	104
<i>Maarouf Korichi ; Abdallah Meraoumia ; Mouhamed Saigaa ; Hakim Bendjenna</i>	
VISUAL SERVING ON A TRIANGULAR PRIMITIVE USING THE MOMENT APPROACH.....	110
<i>Derrar Yasser ; Malti Abed</i>	
MRI IMAGE COMPRESSION USING LEVEL SET METHOD AND BIORTHOGONAL CDF WAVELET BASED ON LIFTING SCHEME	116
<i>Imane Haouam ; Mohammed Beladgham ; Ridha Ilyas Bendjillali ; Habchi Yassine</i>	

VEHICLE DENSITY, VEHICLE SPEED AND PACKET INTER-ARRIVAL TIME ANALYSIS IN IEEE 802.11P EDCA BASED VANETS	123
<i>Yacine Harkat ; Abderrahmane Amrouche</i>	
OBJECT PRE-GRASP CONFIGURATION OF A ROBOT ARTICULATED HAND IN A VIRTUAL ENVIRONMENT	129
<i>A. Bouachari ; J F Brethé ; A. Haddad</i>	
LOCALIZATION OF SCORES AND AVERAGE IN ALGERIAN BACCALAUREATE TRANSCRIPTS	135
<i>Abderrahmane Kefali ; Soumia Drabsia</i>	
DEEP LEARNING AND CYCLOPEAN VIEW FOR NO-REFERENCE STEREOSCOPIC IMAGE QUALITY ASSESSMENT	141
<i>Oussama Messai ; Fella Hachouf ; Zianou Ahmed Seghir</i>	
PANSHARPENING MULTISPECTRAL IMAGES BASED ON UNCONSTRAINED LEAST SQUARE SPECTRAL UNMIXING	147
<i>Mohamed Amine Bendoumi ; Tarek Benlefkki ; Riad Saadi</i>	
COMPRESSED SENSING APPLICATION ON NON SPARSE SAR IMAGES BASED ON COSAMP ALGORITHM	153
<i>Slim Rouabah ; Mounira Ouarzeddine ; Boularbah Souissi</i>	
HIGH-K DIELECTRIC BASED AMORPHOUS SILICON THIN-FILM TRANSISTOR FOR MEDICAL IMAGING.....	159
<i>Belkacemi Siham ; Hafdi Zoubeida</i>	
AN IMPROVED MULTI-BAGS-OF-FEATURES HISTOGRAMS REPRESENTATION FOR EAR RECOGNITION.....	164
<i>Hakim Doghmane ; Hocine Bourouba ; Abdelhani Boukrouche ; Layachi Bennacer</i>	
OPTIMAL FILTERING OF WAVELET-BASED MULTIPLE DESCRIPTION IMAGE CODING USING CORRELATING TRANSFORMS	171
<i>K. Khelil ; T. Bouadjila ; F. Berrezek</i>	
RADAR ECHOES CLASSIFICATION BASED ON LOCAL DESCRIPTOR	175
<i>Mehdia Hedir ; Fethi Demim ; Boualem Haddad</i>	
ENHANCED SPECTRAL EFFICIENCY OF SPATIAL MODULATION BASED ON CHIRP WAVEFORM	181
<i>Mokrane Hamitouche ; Mustapha Benssaleh ; Mustapha Djeddou</i>	
FAULT DIAGNOSIS IN INDUCTION MOTOR USING PATTERN RECOGNITION AND NEURAL NETWORKS	186
<i>A. Kerboua ; A. Metatla ; R. Kelailia ; M. Batouche</i>	
DEEP TEXTURE REPRESENTATION FOR BREAST MASS CLASSIFICATION.....	193
<i>Sawsen Boudraa ; Ahlem Melouah ; Hayet Farida Merouani</i>	
FPGA HARDWARE DESIGN OF A UNIFIED CHAOTIC SYSTEM FOR CTRNG.....	197
<i>M. S. Azzaz ; M. A. Krimil ; F. Labiod ; A. Kadir ; D. Teguig</i>	
SET-MEMBERSHIP FAST-NLMS ALGORITHM FOR ACOUSTIC ECHO CANCELLATION	201
<i>Islam Hassani ; Madjid Arezki ; Ahmed Benallal</i>	
DISCRIMINATION OF OSTEOPATHIC PATIENTS USING LOGISTIC REGRESSION MODEL	206
<i>Khaled Harrar ; Rachid Jennane ; Karima Zaouchi ; Eric Lespessailles</i>	
SPLIT VECTOR QUANTIZATION OF COMPRESSIVE SAMPLING MEASUREMENTS FOR SPEECH COMPRESSION.....	211
<i>Houria Haneche ; Bachir Boudraa ; Abdeldjalil Ouahabi</i>	
BIOMETRIC CRYPTOSYSTEM SCHEME FOR INTERNET OF THINGS USING FUZZY COMMITMENT PRINCIPLE.....	217
<i>Atef Bentahar ; Abdallah Meraoumia ; Hakim Bendjenna ; Salim Chitroub ; Abdelhakim Zeroual</i>	
PERFORMANCES OF SELECTION HYPERCHAOTIC SPREADING SEQUENCES IN A DOWNLINK DS-CDMA SYSTEMS	223
<i>I. Fennouh ; S. Sadoudi ; C. Tanougast</i>	
IPSEC/FIREWALL SECURITY POLICY ANALYSIS: A SURVEY	229
<i>Roumaissa Khelf ; Nacira Ghoulmi-Zine</i>	
SWITCHING BETWEEN BAYESIAN VISUAL TRACKING AND CORRELATION MATCHING	236
<i>Tarek Benlefkki ; Mohamed Amine Bendoumi</i>	
FACIAL SUB-REGIONS FOR AUTOMATIC EMOTION RECOGNITION USING LOCAL BINARY PATTERNS	242
<i>Yacine Yaddaden ; Mehdi Adda ; Abdenour Bouzouane ; S'ebastien Gaboury ; Bruno Bouchard</i>	
OFF-LINE ARABIC HANDWRITING RECOGNITION SYSTEM BASED ON ML-LPQ AND CLASSIFIERS COMBINATION	248
<i>Aicha Korichi ; Oussama Aiadi ; Belal Khaldi ; Sihem Slatnia ; Mohammed Lamine Kherfi</i>	

NOVEL APPROACH OF FACE IDENTIFICATION BASED ON MULTI-SCALE LOCAL BINARY PATTERN	254
<i>Zineb Youbi ; Ali Khider ; Larbi Boubchir ; Abdelhani Boukrouche ; Badreddine Griouz</i>	
CONTENT BASED IMAGE RETRIEVAL USING WAVELET MOMENTS AND LOCAL BINARY PATTERNS IN CIE-L*A*B* COLOR SPACE.....	258
<i>Leïla Boussaad</i>	
THE IMPROVING OF BIOMETRIC IMAGE QUALITY COMPRESSION USING WAVELET AND SPIHT CODING	265
<i>Ahmed Bouida ; Ismahane Benyahia ; Mohammed Beladgham ; Khaled Merit</i>	
ARTIFACT REMOVAL FROM ELECTROCARDIOGRAM SIGNAL: A COMPARATIVE STUDY S.....	271
<i>S. Belkacem ; N. Messaoudi ; Z. Dibi</i>	
LOW COST RTL-SDR BASED RECEIVER TO MONITOR NEIGHBORING 3MHZ-2GHZ FREQUENCY ACTIVITIES.....	276
<i>Reda Yagoub ; Mohamed Benaïssa ; Bennada Belkacem ; Fatima Zohra Ounadjela ; Nafissa Bouhafna</i>	
ANALYSIS OF ACOUSTIC PARAMETERS FROM RESPIRATORY SIGNAL IN COPD AND PNEUMONIA PATIENTS	278
<i>Zakaria Neili ; Mohamed Fezari ; Redjati Abdeghani</i>	
EXPLORING THE USE OF THE LOWER PART OF THE LEGS FOR PEOPLE IDENTIFICATION	282
<i>Amara Bekhouch ; Imed Bouchrika ; Nouredine Doghmane</i>	
CHARACTERIZATION OF SWITCHABLE TWO NOTCHED METALLIC PARALLEL STRIPS FSS USING WCIP METHOD FOR MULTIBAND AND DUAL POLARIZED APPLICATIONS.....	288
<i>Karima Bencherif ; Mohammed Titaouine ; Awatef Djouimaa ; Raouia Saidi ; Manel Aouissi ; Ibtissem Adoui ; Henri Baudrand</i>	
QUALITY EVALUATION ALGORITHM: NEW STRUCTURAL SIMILARITY BY USING DISTANCE TRANSFORM APPROACH AND GRADIENT SIMILARITY.....	293
<i>Zianou Ahmed Seghir ; Fella Hachouf ; Mounir Hemam ; Frédéric Morain-Nicolier ; Ahmed Zeggari</i>	
AUTOMATIC CLASSIFICATION OF DISORDERED VOICES WITH HIDDEN MARKOV MODELS.....	299
<i>Redouane Benhammoud ; Abdellah Kacha</i>	
COMPRESSIVE SENSING-BASED UNDERGROUND CHANNEL ESTIMATION OPERATING IN MILLIMETER-WAVE BAND.....	305
<i>Widad Belaoura ; Khalida Ghanem ; Mourad Nedil ; Hicham Bousbia-Salah ; Rym Labdaoui</i>	
BREAST CANCER DIAGNOSIS USING AN ENHANCED EXTREME LEARNING MACHINE BASED-NEURAL NETWORK.....	310
<i>Mohamed Nemissi ; Halima Salah ; Hamid Seridi</i>	
DESIGN OF A CHAOS BASED CRYPTOSYSTEM FOR ENCRYPTING DATA RECEIVED THROUGH GPS TRACKER.....	314
<i>M. A. Krimil ; M. S. Azzaz ; S. Sadoudi ; S. Sakhi</i>	
NEURAL ADAPTIVE FRACTIONAL ORDER DIFFERENTIAL BASED ALGORITHM FOR MEDICAL IMAGE ENHANCEMENT	320
<i>Houda Krouma ; Youcef Ferdi ; Abdelmalik Taleb-Ahmed</i>	
Author Index	