ICSAP 2011
2011 3rd International Conference on
Signal Acquisition and Processing

26-28, February, 2011
Singapore

Volume 2

PROCEEDINGS
Dear Distinguished Delegates and Guests,

The Organizing Committee warmly welcomes our distinguished delegates and guests to the 2011 3rd International Conference on Signal Acquisition and Processing (ICSAP 2011) held during February 26-28, 2011 in Singapore.

ICSAP 2011 is co-sponsored by IACSIT and IEEE. If you have attended a conference sponsored by IACSIT before, you are aware that the conferences together report the results of research efforts in a broad range of computer science and Information Technology. These conferences are aimed at discussing with all of you the wide range of problems encountered in present and future high technologies. The ICSAP is organized to gather members of our international community scientists so that researchers from around the world can present their leading-edge work, expanding our community’s knowledge and insight into the significant challenges currently being addressed in that research. The conference Program Committee is itself quite diverse and truly international, with membership from the Americas, Europe, Asia, Africa and Oceania.

This proceeding records the fully refereed papers presented at the conference. The main conference themes and tracks are Signal Acquisition and Processing. The main goal of these events is to provide international scientific forums for exchange of new ideas in a number of fields that interact in-depth through discussions with their peers from around the world. Both inward research; core areas of Signal Acquisition and Processing and outward research; multi-disciplinary, inter-disciplinary, and applications will be covered during these events.

The conference has solicited and gathered technical research submissions related to all aspects of major conference themes and tracks. All the submitted papers in the proceeding have been peer reviewed by the reviewers drawn from the scientific committee, external reviewers and editorial board depending on the subject matter of the paper. Reviewing and initial selection were undertaken electronically. After the rigorous peer-review process, the submitted papers were selected on the basis of originality, significance, and clarity for the purpose of the conference. The selected papers and additional late-breaking contributions to be presented as lectures will make an exiting technical program. The conference program is extremely rich, featuring high-impact presentations.

The high quality of the program – guaranteed by the presence of an unparalleled number of internationally recognized top experts – can be assessed when reading the contents of the program. The conference will therefore be a unique event, where attendees will be able to appreciate the latest results in their field of expertise, and to acquire additional knowledge in other fields. The program has been structured to favor interactions among attendees coming from many diverse horizons, scientifically, geographically, from academia and from industry. Included in this will to favor interactions are social events at prestigious sites.

We would like to thank the program chairs, organization staff, and the members of the program committee for their work. Thanks also go to Editors from International Association of Computer Science and Information Technology, for their wonderful editorial service to this proceeding.

We are grateful to all those who have contributed to the success of ICSAP 2011. We hope that all participants and other interested readers benefit scientifically from the proceedings and also find it stimulating in the process. Finally, we would like to wish you success in your technical presentations and social networking.

We hope you have a unique, rewarding and enjoyable week at ICSAP in Singapore.
With our warmest regards,

The Organizing Committees
February 26-28, 2011
Singapore
## CONTENTS

<table>
<thead>
<tr>
<th>Preface</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizing Committees</td>
<td>xiii</td>
</tr>
</tbody>
</table>

### ICSAP 2011 Session 1

**Measurement of Dielectric Constant of Silicon Wafers Using Free-Space Method and DC-Technique**

*Nani Fadzilina Naim, Noor Hasimah Baba, Raudah Abu Bakar, Maizatul Zolkapli, Ahmad Sabirin Zoofakar and Nadia Md Kamal*

V2-1

**Text Independent Speaker Identification Using Bessel Features**

*Viresh Ranjan, Chetana Prakash, Shivsh Ranjan and Suryakanth V. Gangashetty*

V2-6

**Daubechies Wavelet based Compression and Denoising Techniques for Biometric Images**

*Ajay Krishnan, N and Anil kishore*

V2-10

**Evaluation of scalability issue of 802.15.4 MAC for Body Area Networks**

*Pradnya H. Ghare, A.G. Kothari and A.G. Keskar*

V2-15

**A Surveillance System for Hidden Object Location**

*Yin Thu Win, Muhammad Waseem Ashraf, Nitin Afzulpurkar, Shahzadi Tayyaba, Hla Thar Htun and Chumnarn Punyasai*

V2-19

**Channel Coding Role in OFDM Performance Development**

*N.Mosalanejad, A.R. Mallahzadeh and H. Dehghani*

V2-24

**A Comparison of Gait Recognition using PCA with and without Radon Transform**

*Hayder Ali, Jamal Dargham, Chekima Ali and Ervin Gobin Moung*

V2-28

**Time Domain and Frequency Spectrum Analysis of Sound Signal for Drill Wear Detection**

*Hamed Rafezi, Javad Akbari and Mehdi Behzad*

V2-32

**A Hybrid Hopfield Network-Imperialist Competitive Algorithm for Solving the SAT Problem**

*Marjan Abdechiri and Mohammad Reza Meybodi*

V2-37

**The Design of High Precision Temperature Measurement System for Environmental Monitoring Instrument of the Grottoes Protection**

*Dunfan Ye, Xifeng Wang, Guowu Peng, Yun Fang, Dongwei Liu, Hui Zhang and Chao Han*

V2-42

### ICSAP 2011 Session 2

**Image Steganography based on Dual Tree Complex Wavelet Transform**

*Sushil Kumar and S. K. Muttoo*

V2-46

**The Research of Information Fusion of Integrated Navigation System In Time-Frequency Space based on Neural Network and Wavelet**

*Huang Ying*

V2-50

**Visual processing in the context of cognitive flexibility**

V2-53
Mili Mary Mathew, Radish Kumar. B and Dr. Jayashree. S. Bhat

A New Probability Density Modeling for HMM-based Speech Recognition
Bagher BabaAli, Hossein Sameti, Armin Rahmanian and Nasrin Hassanlou

Heart Sound Classification Using State-Based HMM and Murmur Scores
Chul Kwak, In-Sung Lee and Oh-Wook Kwon

Illumination Invariant Moving Object Detection
Chirag I Patel, Nikunj Patel and Ripal Patel

Robust Face Recognition using Distance Matrice
Chirag I Patel, Ripal Patel and Alefiya Nalawala

Counting Cars in Traffic using Cascade Haar with KLP
Chirag I Patel, Ripal Patel and Alefiya Nalawala

Design Framework of Collision Avoidance and Energy Efficient MAC for MWSN
Getsy S Sara and D. Sridharan

A Novel Sparse Kernel Density Estimation Method Based on Kullback-Leibler Divergence
Min Han and Zhiping Liang

ICSAP 2011 Session 3

DCSA Framework of QOE Management for Streaming Media
Liang He, Meng Qiu and Yan Yang

Adaptive Encoding on Bit-plane Based Lossless Color Image Compression
Chien-Pen Chuang and Chia-Chieh Lin

A Hybrid Video Quality Assessment Approach Based on BP Neural-Network over Packet Networks
Liang He, Yan Yang and Jing Xue

Inversion and analysis of buildings height in SAR image based on overlay and shadow
ZHOU Shu-dao, WANG Min, LIU Zhi-hua, HUANG Feng and YE Song

Sparse Representation over Overcomplete Dictionary Based on Bayesian Nonparametric Approximation
Yan He, Donghui Wang and Miaoliang Zhu

GTD-Based 2D State-Space Method and its Application to Recover Shape from Range Signals
Wei Shaoming, Wang Jun, Sun Jinping and Li Fuchuan

A Cyclic Prefix based Extended QRD-RLS Algorithm using Block Householder Transformation for Adaptive Channel Estimation in Multicarrier Systems
Hassan Ali

Bi-static Inverse Synthetic Aperture Radar Imaging for Space Objects
Xiongjun Fu, Chengfa Xu, Meiguo Gao and Jian Dong
SIFT Features Using Vector Quantization histogram for Image Retrieval  
Qiu Chen, Koji Kotani, Feifei Lee and Tadahiro Ohmi  
V2-122

Face Recognition Algorithm Based on Adjacent Pixel Intensity Difference Quantization in Rectangular Coordinate Plane  
Feifei Lee, Koji Kotani, Qiu Chen and Tadahiro Ohmi  
V2-127

ICSAP 2011 Session 4

Comparative Analysis And Implementation of Efficient Digital Image Watermarking Schemes  
M.Ali Qureshi, Abdul Aziz, Bilal Ahmed, Ayesha Khalid and Humera Munir  
V2-131

Evaluation of ZigBee based Wireless Sensor Network with Static Sink and Random Sink Mobility  
Abdul Aziz, M.Ali Qureshi, M.Umair Soorage, M.Noman Kashif and M.Arsalan Hafeez  
V2-136

A Novel Robust Fingerprint Identification System based on Hierarchical Indexing  
Rahul Goyal, Anand Mishra and Krithika Venkataramani  
V2-141

Achieve the Transfer of Traffic Data between Components of GPS / GIS Based on COM  
Wang Hao-yu, Zheng Yi and Dong Yuan  
V2-145

SOA in Traffic Information Systems Application  
Wang Hao-yu, Xue Yun and Dong Yuan  
V2-148

Algorithm for Maximum Metapath Based on Incidence Matrix  
Tan Qun, Li Zhimeng, Peng Li and Yang Xiaoling  
V2-151

Intelligent Learning Algorithm of Power Project Cost Data Based on SVM  
Peng Guangjin, Meng Weidong, Cao Duan, Xu Kunyao, Yang Yunhua and Zhao Ji  
V2-154

Experiment on Compounding Chlorine Consumption Liquid  
Wu juan and Kou ziming  
V2-159

Improved Windowed Cross Wigner-Ville Distribution for PSK Class Signals  
Chee Yen Mei and Ahmad Zuri Sha’ameri  
V2-162

The weighted dual functions for Wang-Said type generalized Ball bases with and without boundary constraints  
D. BAKHSHESH and M. R. SAMIEE  
V2-167

ICSAP 2011 Session 5

An Adaptive Anisotropic Algorithm on SAR Image Denoising  
Miao Hui, Song Guanglei and Zhang Chunhong  
V2-172

Analysis of the structure of a cluster hexagon pattern in dielectric barrier discharge by FFT  
Lifang Dong, Xinchun Li, Ning Lu, Jie Shang and Yuanysuan Li  
V2-176

Study of composition of big spots in a hexagonal superlattice pattern by image analysis  
Lifang Dong, Ning Lu, Xinchun Li, Liang liu and Jie Shang  
V2-179

Investigation of Discharge Power in Hollowneedle-plate Discharge by Signal Processing  
V2-182
Lifang Dong, Yafei Ji, Yonghui Li, Junying Chen and Ning Lu

The Novel Proportionate Normalized Subband Adaptive Filter Algorithms for Sparse System Identification
Mohammad Shams Esfand Abadi and Sima Kadkhodazadeh

Image Enhancement Approach based on Multiscale Retinex Theory
Brhmadesam Sateesh

Optimal Multi-degree Reduction of Bézier Curves with Constraints, using Matrix Computations
D. BAKHSHESH and M. R. SAMIEE

Analysis of the Light Emission Signals based on Probability Density Function
Lifang Dong, Liang Liu, Jie Shang, Qian Song, Ning Lu and Xinchun Li

Study on the Vibration of Dot in a Dynamic Pattern by using FFT
Lifang Dong, Jie Shang, Liang Liu, Xinchun Li and Ning Lu

Fault Diagnosis for Converter Trunnion Bearings Based on Acoustic Emission Technology
Min Li and Jianhong Yang

ICSAP 2011 Session 6

An Image Interpolation-Based Approach to the Detection of Small Moving Target
He Deng, Jiaoguo Liu and Wenquan Wang

Hierarchical Quadrature Amplitude Modulation for Image Transmission over Erroneous Wireless Channels
Md. Abdul Kader and Farid Ghani

Transition and Rotation Compensation in Super Matrix Fingerprint Verification Systems
Mehrdad Zobeiri, Behrouz Zolfaghari, Mohammad Reza Abbasifard and Massoud Dousti

Ant Colony Algorithm for VRP with Time Windows
Mao Wei-Wei and Yu Su-Ping

Local Route Repairing for Inter-piconet Communication in Bluetooth Scatternet
Sheikh Tahir Bakhsh, Halabi Hashullah and Saheen Tahir

Forensic Discrimination of Computer Generated Images and Photographs Using Spectral Correlations in Wavelet Domain
KANG Xiaobing and WEI ShengMin

The Communication Equipment Fault Intelligent Diagnosis System Based on Fuzzy Inference and Knowledge
Lian Tongli, GAO Weidong, CHEN Ling, Xu Jiren and GAO Huaihui

Application of Fast BLMS Algorithm in Acoustic Echo Cancellati on
ZHAO Yue and LI Nian Qiang

Ultrasonic Guided Waves for Inspection of Pile
Li Xiaoyong and Bu Fanjie
Recognition of Farsi Handwritten Digits Using a Small Feature Set
G. Mirsharif, M. Badami, B. Salehi and Z. Azimifar

ICSAP 2011 Session 7

Research and Design a SFN Adapter of CMMB
Dandan Pei and Lunhui Deng

High Speed Residue to Binary Converter for New Five-Moduli Set \(\{2^n, 2^{n/2} - 1, 2^{n/2} + 1, 2^{n+1}, 2^{2n+1}\}\)
Somayeh hassanpour, Mohammad Reza Noori Mehr and Mehdi Hosseinzadeh

Application of Particle filter in Land Vehicle Navigation System
Ning Yang, Ping Li and Jiamin Zhang

Wavelet Non-Standard Form based GPS Signal Acquisition
Yao Zhao, Wei Huang and Yang Liu

Object-oriented Classification of High-resolution Remotely Sensed Imagery
Li Fu, Jian Cheng and Yongheng Zheng

A Modified Landweber Projected Gradient Method for Nonlinear Operator Equation
Wei Huang, Yao Zhao and Di-Rong Chen

Investigation and Implementation of Video Encoder System based on high efficiency and low power SoC
Ming Chen and Zheng-xiang Li

A Physically-informed Method for Signal Enhancement based on a Model for Long-term Instability (Drift)
Shahriar Jamasb

Electronically Operated Anti-Snoring Pillow
Dr.(Mrs.) A.M. Moolchandani and Mr. Rejendra Suryawansh

A COMPARISON OF DWT AND CONTOURLET TRANSFORM ON SATELLITE IMAGE CONTRAST ENHANCEMENT TECHNIQUE
K. Hepsibah Persis and S. J. Grace Shoba

ICSAP 2011 Session 8

EEG Based Automatic Anesthesia Injector
Sriram Raju and Sarangarajan Rajagopal

Brain Tumor Boundary Detection in MRI Image Using Active Contours and Morphology Filters
Rasool Baghbani Khezerloo, Masoomeh Ashoori Rad and Alireza Mehridehnavi

ANALOGUE/DIGITAL SIGNAL MODULATION RECOGNITION USING SPEECH FEATURE DETECTION
BAO Jie and WANG Fuping

Zigbee-based wireless ultrasonic level sensor networks with solar-powered system
<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigating Misbehaving Node Using Receiver Network Allocation Vector</td>
<td>R. Kalairasi and D. Sridharan</td>
<td>V2-315</td>
</tr>
<tr>
<td>Torsional Vibration Monitoring Platform for Turbine Generator</td>
<td>CHANG Guang, ZHAO Ting, LUO Liquan, WANG Yi and HUANG Baohua</td>
<td>V2-319</td>
</tr>
<tr>
<td>Feature Extraction From Phonocardiogram to Assist Disease Diagnosis</td>
<td>S.RAJESWARI</td>
<td>V2-323</td>
</tr>
<tr>
<td>Checking Reliability Of Component And Testing Time Allocation</td>
<td>B.Anni Princy and Dr.S.Sridhar</td>
<td>V2-326</td>
</tr>
<tr>
<td>A Novel Design of Low Timing Mismatches Clock Module for 8-Channel</td>
<td>Ran HUO and Yuexian ZOU</td>
<td>V2-333</td>
</tr>
<tr>
<td>INFORMATION FUSION BY MULTI MATCHER FOR 3D FACE RECOGNITION</td>
<td>Mohamed Anouar BORGI, Chokri BEN AMAR, Salwa SAID and Boulbaba BEN AMOR</td>
<td>V2-338</td>
</tr>
<tr>
<td>Implementation of Space-Time Turbo Coded MC-CDMA Systems</td>
<td>Lokesh Kumar Bansal and Aditya Trivedi</td>
<td>V2-344</td>
</tr>
<tr>
<td>A Forward Model Application to Complex Structure Interpretation</td>
<td>Shuhua Wang</td>
<td>V2-349</td>
</tr>
<tr>
<td>Research and Implementation of Fingerprint Image Preprocessing</td>
<td>Zhang junfeng and Xuebing</td>
<td>V2-352</td>
</tr>
<tr>
<td>Study on SLAM For Mobile Robot Based On Sonar Particle Filter</td>
<td>Wei HUO, Davei Liu and Xuguang Zheng</td>
<td>V2-356</td>
</tr>
<tr>
<td>Investigation of the electrical parameters in dielectric barrier</td>
<td>Lifang Dong, Yongjie Wang, Liang Liu, Xinchun Li, Jie Shang and Hong Xiao</td>
<td>V2-360</td>
</tr>
<tr>
<td>Face Detection in Skin-Toned Images Through Wavelet Edges and Neural Network</td>
<td>HC VijayLakshmi and Sudarshan PatilKulkarni</td>
<td>V2-363</td>
</tr>
<tr>
<td>RCSDN : a Distributed Balanced Routing Algorithm with Optimized</td>
<td>Arash Ghorbannia Delavar, Javad Artin and Mohammad Mehdi Tajari</td>
<td>V2-368</td>
</tr>
<tr>
<td>Multi-target Tracking with Target Birth Modeling</td>
<td>Xiaobo Chen and Aidong Men</td>
<td>V2-373</td>
</tr>
<tr>
<td>Acceleration of Affine Transform for Multiplane Image Stabilization</td>
<td>Pulak Mondal, Pradyut Kumar Biswal and Swapna Banerjee</td>
<td>V2-378</td>
</tr>
</tbody>
</table>
VLSI Architecture Design of MDCT-Based Psychoacoustic Model for MPEG 2/4 AAC Encoder
Yu-Jie Sha, Sz-Yan Li and Tsung-Han Tsai

ICSAP 2011 Session 10

A Simple Anomaly Detection for Spectral Image Using Co-occurrence Statistics Techniques
Kitti Koonsanit and Chuleerat Jaruskulchai

A FUSION APPROACH FOR SIGNATURE RECOGNITION
M.Mani Roja and Dr. Sudhir Sawarkar

A Fast Algorithm for Detecting, Labeling and Tracking Volleyball Players in Sport Videos
Hananeh Salehifar, Mohammad Mahdi Dehshibi and Azam Bastanfard

Toward Clustering Persian Vowel Viseme: A New Clustering Approach based on HMM
Maedeh Moghadam, Azam Bastanfard and Mohammad Mahdi Dehshibi

Outage Analysis and APA for MIMO based Multi-user Opportunistic Relaying Cooperation Systems
Li Jun, He Bo, Lin Fei, CHU Hong-fa and Hou Meng

A Novel THP and Detection Joint Equalization Algorithm For MIMO Frequency Selective Fading Channels
CHU Hong-fa, NIU Kai, HE Zhi-qiang, YU Dan and WU Wei-ling

Design and Realization of UDA1380 Based Digital Recorder & Player
Jiang Hualong, Zhang Xiuying and He Huaping

Design and Realization of TEA5768 Based Digital FM Radio
Huaping He, Xiuying Zhang and Hualong Jiang

Soft Sensor Method of Temperature Measurement Using CCD Image Color Based on LS-SVM
Lingyan Wu and Gang Cai

Cramér-Rao Lower Bound Analysis for Many-to-One UAV Tracking Using FDOA Measurements
Byoung Yoon Min, Chan-ho An, Dong Ku Kim, Seok Jun Hong, Jin Sang Jang and Ui Young Pak

ICSAP 2011 Session 11

Secure Genetic based Image Steganography System in Frequency Domain
Azizah Bt Abdul Manaf and Zahra Moghaddasi

A New method for Image Segmentation in Heart Vessels Ultrasound using Wavelet Transform
Ayyoob Jafari

Transforming Semantic Models of What-Questions into Indri Query Language on IndriBasedQA System
Dang Tuan Nguyen, Phong Nguyen Tran and Van Bich Nguyen

A Cheap Visual Inspection System for Measuring Dimensions of Brass Gear

Mehdi Jalili, Hadi Dehgan and Esmaeil Nourani

Fusion of infrared and visible images based on the second generation Curvelet transform and SGNN
Zhongzhong Xu and Shiru Qu

V2-451

Self Organizing Map Approach for Improvement of BER Performance of OFDM Receiver
Mrs. Shubhangi Rathkanthiwar, Dr. C. G. Dethe and Dr. K. D. Kulat

V2-456

Self alignment of low cost vehicle using Sigma Point Filters
Siddiqui Saman Mukhtar and Fang Jiancheng

V2-460

Design of Radar Data Acquisition and Analysis System with FPGA and USB2.0
Ding Hao, Song Jie and Guan Jian

V2-465

Application of Data Warehouse and Data Mining Techniques in Retail Decisionmaking System
Jiang Xiuying

V2-470

ELECTRO MAGNETIC INTERFERENCE NOISE SEPERATION FOR POWER SUPPLIES
R. Dhanasekaran and G. Thiagu

V2-473

ICSAP 2011 Session 12

A Cluster-Tree Routing Algorithm with Reduced Routing Overhead in ZigBee Networks
Yan Liu, Hao Zhu, Zonghai Gu, Shenshen Zhu and Wei Li

V2-478

A Technique for Gray Scale Image into Color Image Conversion
Vijay Kumar Samyal, Parminder Singh and Parvinder S. Sandhu

V2-482

Integrated Navigation of a vehicle using Unscented Filter with large initial attitude errors and frequent GPS outages
Siddiqui Saman Mukhtar and Fang Jiancheng

V2-486

Depth Analysis of ZigBee Protocol on Wireless Sensor-actuator Network
Tao Tao, Huiyi Zhang and Zi Teng

V2-491

Research on A.C. Sampling Technique for the Electric Parameters Based on Embedded Linux and Frequency Self-adapting
Tao Tao and Huiyi Zhang

V2-496

Author Index

V2-501
Organizing Committees

Honorary Chair
Kamaruzaman Jusoff, Universiti Putra Malaysia, Malaysia
Christos Grecos, University of Central Lancashire, UK
S.R.Bhadra Chaudhuri, Bengal Engineering and Science University, India

Conference Chairs
Xiaoxiao Zhou, Nanyang Technological University, Singapore
S. M. Aqil Burney, University of Karachi, Pakistan
S.Arumuga Perumal, S.T.Hindu College, India

Conference Steering Committee
Naomie Salim, Universiti Teknologi of Malaysia, Malaysia
Ir. David B.L. Bong, Universiti Malaysia Sarawak, Malaysia
Brian B. C. Shinn, Chungbuk National University, Korea
R.Sivakumar, R.M.K. Engineering College, India

Program Committee Chairs
Anton Satria Prabuwono, Technical University of Malaysia Melaka, Malaysia
Venkatesh Mahadevan, Swinburne University of Technology, Australia
Jivesh Govil, Cisco Systems Inc., USA

Publicity Chairs
Kaninda Musumbu, Université Bordeaux 1, France
Rosilawati Zainol, Universiti Malaya, Malaysia
Choo Ai Ling, Swinburne University of Technology, Malaysia
Reviewers

Technical Committee

Lili Nurliyana Abdullah, University of Putra Malaysia, Malaysia
Hung-Min Sun, National Tsing Hua University, China (Taiwan)
V. Saravanan, Karunya University, Tamil Nadu, India
Nazir Ahmad Zafar, University of Central Punjab, Pakistan
Madhu S. Nair, Rajagiri College of Social Sciences, India
Kamaruzaman Jusoff, USA, Yale University, USA
Richard M. Voyles, Denver University, USA
Dong-Jae Kang, S/W Content Research Lab, ETRI, Korea
Sang Ho Lee, Soongsil University, Korea
Hassan Fathabadi, Azad University, Iran
Ahmed Wasif Reza, Multimedia University, Malaysia
Ahmed Samak, Menoufia University, Egypt
Kenny Robert F., University of Central Florida, USA
Mostafa Mahmoud, Taibah University, Saudi Arabia
Qing Zhu, Renmin University of China, China
Najla Algadi, Ahmed Ali, Sudan University of Science and Technology, Sudan
Mullen Laurie, Ball State University, USA
Safaa S. Mahmoud, Ain Shams University, Egypt
Jianqiang Sun, South China University of Technology, China
Rajan John, Karunya University, India
Capanni Niccolo, The Robert Gordon University, UK
Mahanti Prabhat Kumar, University of New Brunswick, Canada
Peddoju Sateesh Kumar, Balaji Institute of Technology & Science, India
Sevaux Marc, University of South-Brittany, France
Tahseen A. Jilani, University of Karachi, Pakistan
Soumit, Chowdhury, Government College of Engineering & Ceramic Technology, India
Vlacic Ljubo, Griffith University, Australia
Wei Guo, Tianjin University, China
Bhaba Krishna Mohanty, Indian Institute of Management, India
Agarwal Ankur, Florida Atlantic University, USA
Parvinder S. Sandhu, Rayat & Bahra Institute of Engineering & Bio-Technology, India
Wenfa Hu, Tongji University, China
Steve Thatcher, University of South Australia, Australia
Jakkree Srinonchat, Rajamangala University of Technology Thanyaburi, Thailand
M. Nasseh Tabrizi, East Carolina University, USA
Hussein Moselhy Sayed Ahmed, Cairo University, Egypt
Sonam Tobgay, Royal University of Bhutan, Bhutan
P.Kiran Sree, S.R.K .Institute of Technology, India
Nasro Min-Allah, COMSATS Institute of Information Technology, Pakistan
Basim Alhadidi, Al Balqa’ Applied University, Jordan
Taher Omran Ahmed, Aljabal Alghrbi University, Libya
Pierre Andr´e M´enard, Ecole de technologie sup´erieure, Canada
Rajesh K Shukla, Corporate Institute of Science & Technology, India
Bruce Moulton, University of Technology, Sydney, Australia
Dr. Messaouda AZZOUZI, Ziane Achour University of Djelfa, Algeria
ICSAP 2011

2011 3rd International Conference on

Signal Acquisition and Processing