

International Conference on Signal and Image Processing

(CISP 2013)

Journal of Signal and Information Processing
Volume 4, Number 3B

Beijing, China
14-16 July 2013

Editors:

Baozong Yuan

Qiuqi Ruan

ISBN: 978-1-63266-778-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2013) by the Scientific Research Publishing Inc.
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact the Scientific Research Publishing Inc.
at the address below.

Scientific Research Publishing Inc.
P.O. Box 54821
Irvine, CA 92619-4821

Phone: (408) 329-4591

bookorder@scirp.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Volume 4 Number 3B

August 2013

Applying Score Reliability Fusion to Bi-Model Emotional Speaker Recognition	
H. B. Zhang, T. Wang, T. Huang, X. Yang.....	1
Xilinx System Generator® Based Implementation of a Novel Method of Extraction of Nonstationary Sinusoids	
M. Abubakar, A. Aziz, P. Akhtar.....	7
SAR Imaging of Moving Target Based on Quadratic Phase Function	
C. Wang, S. B. Li.....	14
Environmental Sound Recognition Using Double-Level Energy Detection	
X. X. Zhang, Y. Li.....	19
Semi-Rigid Registration of 3D Points	
B. W. Lin, K. Sakai, T. Tamaki, B. Raychev, K. Kaneda, K. Ichii.....	25
Research on Motion Attention Fusion Model-Based Video Target Detection and Extraction of Global Motion Scene	
L. Liu, B. Y. Fan, J. Zhao.....	30
Liver Segmentation from CT Image Using Fuzzy Clustering and Level Set	
X. C. Li, S. H. Luo, J. M. Li.....	36
Color Texture Image Inpainting Using the Non Local CTV Model	
J. M. Duan, Z. K. Pan, W. Q. Liu, X.-C. Tai.....	43
Template Matching using Statistical Model and Parametric Template for Multi-Template	
C.-S. Chen, J.-J. Huang, C.-L. Huang.....	52
Performance Comparison of Three Algorithms Applied to UM2000 Signal Demodulation	
Z. C. Qiao, F. P. Wang.....	58
Combining Multiple Cues for Pedestrian Detection in Crowded Situations	
S.-S. Huang, F.-C. Chang, C.-H. Lu.....	62
Fuzzy C Mean Thresholding based Level Set for Automated Segmentation of Skin Lesions	
A. Masood, A. A. Al-Jumaily.....	66
A Study of Motor Bearing Fault Diagnosis using Modulation Signal Bispectrum Analysis of Motor Current Signals	
A. Alwodai, T. Wang, Z. Chen, F. S. Gu, R. Cattley, A. Ball.....	72
Computer Tomography and Ultrasonography Image Registration Based on the Cooperation of GPU and CPU	
Y.-C. Lin, C.-L. Huang, C.-S. Chen, W.-C. Chang, Y.-J. Chen, C.-Y. Liu.....	80

Combined Dictionary Learning in Facial Expression Recognition	
Z. Y. Zhang, K. Raahemifar.....	86
Optimal Design for MIMO Relay System	
F. N. Chen.....	91
Holographic Microwave Imaging Array for Brain Stroke Detection	
L. L. Wang, A. M. Al-Jumaily, R. Simpkin.....	96
Segmenting Salient Objects in 3D Point Clouds of Indoor Scenes Using Geodesic Distances	
S. Bhatia, S. K. Chalup.....	102
Image Processing Techniques in Shockwave Detection and Modeling	
S. X. Cui, Y. H. Wang, X. Q. Qian, Z. T. Deng.....	109
Corner-Based Image Alignment using Pyramid Structure with Gradient Vector Similarity	
C.-S. Chen, K.-Y. Peng, C.-L. Huang, C.-W. Yeh.....	114
Discrete Entropic Uncertainty Relations Associated with FRFT	
G. L. Xu, X. T. Wang, L. J. Zhou, L. M. Shao, X. G. Xu.....	120
Robust Low-Power Algorithm for Random Sensing Matrix for Wireless ECG Systems Based on Low Sampling-Rate Approach	
M. Balouchestani, K. Raahemifar, S. Krishnan.....	125
A Transient Enhancement Method for Two-Stage Helicopter Gearbox Fault Diagnosis Based on ALE	
X. G. Tian, T. Wang, Z. Chen, F. S. Gu, A. Ball.....	132
Frequency Synchronization in OFDM System	
C. G. Priya, A. M. Vasumathi.....	138
New Approach in Processing of the Infrared Image Sequence for Moving Dim Point Targets Detection	
A. M. Mohamed, H. Z. Li.....	144
Local Orientation Field Based Nonlocal Means Method for Fingerprint Image De-Noising	
J. Zou, J. B. Feng, X. M. Zhang, M. Y. Ding.....	150
Face Recognition Using Chain Codes	
N. B. Boodoo-Jahangeer, S. Baichoo.....	154
Restricted Hysteresis Reduce Redundancy in Edge Detection	
B. Li, U. Söderström, S. Ur Réhman, H. B. Li.....	158
Comparison of Wavelet Types and Thresholding Methods on Wavelet Based Denoising of Heart Sounds	
B. Ergen.....	164
A Real Time Mosaic Method for Remote Sensing Video Images from UAV	
F. E. M. Al-Obaidi, A. A. D. Al-Zuky, A. M. Al-Hillou.....	168
An Overview of Principle Component Analysis	
S. Karamizadeh, S. M. Abdullah, A. A. Manaf, M. Zamani, A. Hooman.....	173