International Conference on Communication, Image and Signal Processing (CCISP 2016)

Journal of Physics: Conference Series Volume 787

Dubai, United Arab Emirates
18 – 20 November 2016

Editors:

Yucong Duan
Raj Jain

ISBN: 978-1-5108-3685-3
ISSN: 1742-6588

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© (2016) by the Institute of Physics
All rights reserved. The material featured in this book is subject to
IOP copyright protection, unless otherwise indicated.

Printed by Curran Associates, Inc. (2017)

For permission requests, please contact the Institute of Physics
at the address below.

Institute of Physics
Dirac House, Temple Back
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481
Fax: 44 1 17 920 0979

techtracking@iop.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: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

Table of contents

Volume 787

2016 International Conference on Communication, Image and Signal Processing (CCISP 2016)

18–20 November 2016, Dubai, UAE

Accepted papers received: 7 December 2016
Published online: 8 February 2017

Preface

011001
OPEN ACCESS
2016 International Conference on Communication, Image and Signal Processing (CCISP 2016)

011002
OPEN ACCESS
Committees

011003
OPEN ACCESS
Peer review statement

Visualization

012001
OPEN ACCESS
Interactive Visualization of DGA Data Based on Multiple Views

Yujie Geng, Ying Lin, Yan Ma, Zhihong Guo, Chao Gu and Mingtao Wang.....1

012002
OPEN ACCESS
NEB in Analysis of Optical Flow 4 x 4 and 6 x 6-Patches

Shengxiang Xia and Di Liang.....6

012003
OPEN ACCESS
Congestion analysis of pilgrims in Hajj and Umrah congregation using block matching and optical flow

Sumaiyya Farooq, Shoab A Khan and M Usman Akram.....12

012004
OPEN ACCESS
Approaching to Genuine Monochromatic Light Filters Employing A Serially Coupled Triple Ring Resonator System

Phichai Youplao.....17

012005
OPEN ACCESS
A Three-dimensional Topological Model of Ternary Phase Diagram

Yingxue Mu and Hong Bao.....23

012006
OPEN ACCESS
HTTM - Design and Implementation of a Type-2 Hypervisor for MIPS64 Based Systems

Qurrat ul Ain, Usama Anwar, Muhammad Amir Mehmood and Abdul Waheed.....29

012007
OPEN ACCESS
Golden Rectangle Treemap

Liangfu Lv, Shiliang Fan, Maolin Huang, Weidong Huang and Guolan Yang.....34

Image Processing

012008
OPEN ACCESS
Bayesian Framework with Non-local and Low-rank Constraint for Image Reconstruction

Zhonghe Tang, Shengzhe Wang, Jianliang Huo, Hang Guo, Haibo Zhao and Yuan Mei.....40

012009
OPEN ACCESS
Electrical Inspection Oriented Thermal Image Quality Assessment

Ying Lin, Menglin Wang, Xiaojin Gong, Zhihong Guo, Yujie Geng and Demeng Bai.....52

012010
OPEN ACCESS
The segmentation of Thangka damaged regions based on the local distinction

Bi Xuehui, Liu Huaming, Wang Xiuyou, Wang Weilan and Yang Yashuai.....58

012011
OPEN ACCESS
A multiple classifier system based on Ant-Colony Optimization for Hyperspectral image classification

Ke Tang, Li Xie and Guangyao Li.....66

012012
OPEN ACCESS
A Novel Method for Edge Detection in Images Based on Particle Swarm Optimization

C Baby Sherin and L. Mredhula.....75

012013
OPEN ACCESS
Micro-Expression Recognition based on 2D Gabor Filter and Sparse Representation

Hao Zheng.....80

012014
OPEN ACCESS
New Denoising Method Based on Empirical Mode Decomposition and Improved Thresholding Function

Wahiba Mohguen and RaïsEl'hadiBekka.....86

012015
OPEN ACCESS
Identity Recognition Algorithm Using Improved Gabor Feature Selection of Gait Energy Image

LIANG Chao, JIA Ling-yao and SHI Dong-cheng.....92

012016
OPEN ACCESS
Normal Vector Projection Method used for Convex Optimization of Chan-Vese Model for Image Segmentation

W B Wei, L Tan, M Q Jia and Z K Pan.....98

012017
OPEN ACCESS
Video Stabilization Using Feature Point Matching

Shamsundar Kulkarni, D.S Bormane and S.L Nalbalwar.....107

012018
OPEN ACCESS
GPU accelerated Foreign Object Debris Detection on Airfield Pavement with visual saliency algorithm

Jun Qi, Guoping Gong and Xiaoguang Cao.....113

012019
OPEN ACCESS
Adaptive classifier for steel strip surface defects

Mingming Jiang, Guangyao Li, Li Xie, Mang Xiao and Li Yi.....119

012020
OPEN ACCESS
Weighted Discriminative Dictionary Learning based on Low-rank Representation

Heyou Chang and Hao Zheng.....129

012021
OPEN ACCESS
Morphology operators construction by adaptive elliptical structuring elements based on nonlinear structure tensor

Chunming Tang, Xinlei Liu, Yanjie Li and Hongbo Zhao.....135

012022
OPEN ACCESS
Architecture and Key Techniques of Augmented Reality Maintenance Guiding System for Civil Aircrafts

Zhou hong and Lu Wenhua.....143

012023
OPEN ACCESS
Counterfeit Electronics Detection Using Image Processing and Machine Learning

Navid Asadizanjani, Mark Tehranipoor and Domenic Forte.....150

Wireless

012024
OPEN ACCESS
Noncoherent detection of DQPSK in OFDM systems using predictive VA

Vineel K Veludandi and K Vasudevan.....156

012025
OPEN ACCESS
Adaptive Beamforming with Inadequate Snapshots

Jing YU and Yaan LI.....161

012026
OPEN ACCESS
DOA estimation based on multiple beamspace measurements sparse reconstruction for manoeuvring towed array

J Yuan, H Xiao, Z M Cai and C Xi.....166

Computing

012027
OPEN ACCESS
Fast Simulation Method for Ocean Wave Base on Ocean Wave Spectrum and Improved Gerstner Model with GPU

Wenqiao Zhang, Jing Zhang and Tianchi Zhang.....172

012028
OPEN ACCESS
Doppler Feature Based Classification of Wind Profiler Data

Swati Sinha, T.V. Chandrasekhar Sarma and Mary Lourde. R.....182

012029
OPEN ACCESS
Rearrangement and Grouping of Data Bits for Efficient Lossless Encoding

Ajitha Shenoy K B, Meghana Ajith and Vinayak M Mantoor.....189

012030
OPEN ACCESS
Alternative Line Coding Scheme with Fixed Dimming for Visible Light Communication

M T Niaz, F Imdad and H S Kim.....194

012031
OPEN ACCESS
Time Granularity Transformation of Time Series Data for Failure Prediction of Overhead Line

Yan Ma, Wenbing Zhu, Jinxia Yao, Chao Gu, Demeng Bai and Kun Wang.....200

012032
OPEN ACCESS
Optimizing System Call Latency of ARM Virtual Machines

Song-Woo Sok, Young-Woo Jung and Cheol-Hun Lee.....205

Image Processing

012033
OPEN ACCESS
Detection of Pigment Networks in Dermoscopy Images

Khalid Eltayef, Yongmin Li and Xiaohui Liu.....210

012034
OPEN ACCESS
Detection of Melanoma Skin Cancer in Dermoscopy Images

Khalid Eltayef, Yongmin Li and Xiaohui Liu.....217