PROCEEDINGS OF SPIE

SPIDigitalLibrary.org/conference-proceedings-of-spie

Front Matter: Volume 8285

, "Front Matter: Volume 8285," Proc. SPIE 8285, International Conference on Graphic and Image Processing (ICGIP 2011), 828501 (30 September 2011); doi: 10.1117/12.915884

SPIE.

Event: 2011 International Conference on Graphic and Image Processing,
2011, Cairo, Egypt

PROCEEDINGS OF SPIE

International Conference on Graphic and Image Processing (ICGIP 2011)

**Yi Xie
Yanjun Zheng**
Editors

**1-2 October 2011
Cairo, Egypt**

Organized by
International Association of Computer Science and Information Technology (Singapore)

Sponsored by
Singapore Institute of Electronics (Singapore)

Published by
SPIE

Volume 8285
Part One of Three Parts

Proceedings of SPIE, 0277-786X, v. 8285

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

International Conference on Graphic and Image Processing (ICGIP 2011), edited by Yi Xie, Yanjun Zheng,
Proc. of SPIE Vol. 8285, 828501 · © 2011 SPIE · CCC code: 0277-786X/11/\$18 · doi: 10.1117/12.915884

Proc. of SPIE Vol. 8285 828501-1

The papers included in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. The papers published in these proceedings reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *International Conference on Graphic and Image Processing (ICGIP 2011)*, edited by Yi Xie, Yanjun Zheng, Proceedings of SPIE Vol. 8285 (SPIE, Bellingham, WA, 2011) Article CID Number.

ISSN 0277-786X

ISBN 9780819489326

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

SPIE.org

Copyright © 2011, Society of Photo-Optical Instrumentation Engineers

Copying of material in this book for internal or personal use, or for the internal or personal use of specific clients, beyond the fair use provisions granted by the U.S. Copyright Law is authorized by SPIE subject to payment of copying fees. The Transactional Reporting Service base fee for this volume is \$18.00 per article (or portion thereof), which should be paid directly to the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923. Payment may also be made electronically through CCC Online at copyright.com. Other copying for republication, resale, advertising or promotion, or any form of systematic or multiple reproduction of any material in this book is prohibited except with permission in writing from the publisher. The CCC fee code is 0277-786X/11/\$18.00.

Printed in the United States of America.

Publication of record for individual papers is online in the SPIE Digital Library.

SPIDigitalLibrary.org

Paper Numbering: Proceedings of SPIE follow an e-First publication model, with papers published first online and then in print and on CD-ROM. Papers are published as they are submitted and meet publication criteria. A unique, consistent, permanent citation identifier (CID) number is assigned to each article at the time of the first publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online, print, and electronic versions of the publication. SPIE uses a six-digit CID article numbering system in which:

- The first four digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B ... 0Z, followed by 10-1Z, 20-2Z, etc.

The CID number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages. Numbers in the index correspond to the last two digits of the six-digit CID number.

Contents

Part One

xxv	<i>Conference Committees</i>
xxvii	<i>Introduction</i>

INTERNATIONAL CONFERENCE ON GRAPHIC AND IMAGE PROCESSING (ICGIP 2011)

8285 02	Implementation tricks of interior-point methods for large-scale linear programs [8285-02] Y. Yuan, Guangdong Univ. of Foreign Studies (China)
8285 03	Using of support vector machines for link spam detection [8285-03] R. V. Sharapov, E. V. Sharapova, Murom Institute of Vladimir State Univ. (Russian Federation)
8285 04	Importance of relationship quality in the success of data warehouse systems [8285-04] A. Almabhouh, A. R. Saleh, A. Ahmad, Univ. Utara Malaysia (Malaysia)
8285 05	Analyzing the power of classes in an object-oriented software system [8285-05] M. Wang, Wenzhou Univ. (China)
8285 06	Case base classification on digital mammograms: improving the performance of case base classifier [8285-06] V. Raman, H. H. Then, Swinburne Univ. of Technology (Malaysia); P. Sumari, Univ. Sains Malaysia Penang (Malaysia); N. Venkatesa Mohan, Shri Krishna's Specialty Hospital (India)
8285 07	Reviewing system of research papers for any scientific conferences: an approach of using Sequel quality business model framework [8285-07] M. H. Shaikh, Mehran Univ. of Engineering & Technology (Pakistan)
8285 08	Robust detection and tracking pedestrian object for real time surveillance applications [8285-09] F. Bouseiouane, Univ. Badji Mokhtar (Algeria) and Univ. of Technology of Troyes (France); L. Dib, Univ. Badji Mokhtar (Algeria); H. Snoussi, Univ. of Technology of Troyes (France)
8285 09	Effect of spectral/spatial transformation on remote sensing image for NDVI-based drought detection analysis [8285-12] F. Akbar, N. Suryana, B. Hussin, Univ. Teknikal Malaysia Melaka (Malaysia)
8285 0A	Efficient barycenter algorithm for drawing hierarchical graphs with minimum edge crossings [8285-13] A. A. K. Ismaeel, P. Kumar Shukla, H. Schmeck, Karlsruhe Institute of Technology (Germany)
8285 0B	Pupil detection in video images [8285-14] A. Liaghatdar, K. Kangarloo, F. Farokhi, Azad Univ. (Iran, Islamic Republic of)

- 8285 0C **Usability evaluation of in-housed developed ERP system** [8285-15]
C. M. N. Faisal, National Textile Univ. (Pakistan); M. Shakeel Faridi, Z. Javed, Univ. of Agriculture (Pakistan)
- 8285 0D **Efficient transmission of 1D and 2D chaotic map encrypted images with orthogonal frequency division multiplexing** [8285-16]
H. M. Kasem, M. E. Nasr, E. A. Sallam, F. E. Abd El-Samie, Tanta Univ. (Egypt)
- 8285 0E **Study on the algorithm technology of sub-pixel positioning** [8285-17]
H. Zhang, L. Cui, Chien-shiung Institute of Technology (China)
- 8285 0F **Knowledge portal: a tool to capture university requirements** [8285-28]
M. Mansourvar, N. Binti Mohd Yasin, Univ. of Malaya (Malaysia)
- 8285 0G **A unified framework for building high performance DVEs** [8285-32]
K. Lei, Z. Ma, Southwest Univ. for Nationalities (China); H. Xiong, Hangzhou Real-time Digital Media Co., Ltd. (China)
- 8285 0H **Pomegranate MR images analysis using ACM and FCM algorithms** [8285-35]
G. Moradi, M. Shamsi, M. H. Sedaaghi, Sahand Univ. of Technology (Iran, Islamic Republic of); M. R. Alsharif, Univ. of the Ryukyus (Japan)
- 8285 0I **Cosmic movement detection using image processing** [8285-43]
S. N. Dhage, A. A. Mishra, R. Patil, Sardar Patel Institute of Technology (India)
- 8285 0J **Monocular depth perception using image processing and machine learning** [8285-45]
A. Hombali, V. Gorde, A. Deshpande, Vishwakarma Institute of Technology (India)
- 8285 0K **An affine projection algorithm using grouping selection of input vectors** [8285-47]
J. Shin, N. Kong, P. Park, Pohang Univ. of Science and Technology (Korea, Republic of)
- 8285 0L **Ameliorated GA approach for base station planning** [8285-63]
A. Wang, H. Sun, X. Wu, Beijing Institute of Technology (China)
- 8285 0M **Image resolution enhancement using dual-tree complex wavelet transform and neural networks** [8285-65]
S. Salehi, H. Mahdavi-Nasab, H. Pourghassem, Islamic Azad Univ.-Najafabad Branch (Iran, Islamic Republic of)
- 8285 0N **Segmentation of pomegranate MR images using spatial fuzzy c-means (SFCM) algorithm** [8285-66]
G. Moradi, M. Shamsi, M. H. Sedaaghi, Sahand Univ. of Technology (Iran, Islamic Republic of); M. R. Alsharif, Univ. of the Ryukyus (Japan)
- 8285 0O **The design of PLC circuits based on power electronics topology** [8285-71]
Q. Sun, M. Ouyang, Anhui Univ. of Science and Technology (China)
- 8285 0P **The study on interference problems in communication electronic equipment** [8285-73]
M. Zhao, Z. Zhu, Anhui Univ. of Science and Technology (China)

- 8285 0Q **Content-based image retrieval using color features of partitioned images** [8285-75]
M. Fathian, F. A. Tab, Univ. of Kurdistan (Iran, Islamic Republic of)
- 8285 0R **Flexible use and technique extension of logistics management** [8285-76]
F. Xiong, HuBei Univ. of Technology (China)
- 8285 0S **De-noising algorithm for SAR image based on enhanced contourlet transform domain** [8285-79]
C. Lu, L. Sheng, S. Liu, Hefei Univ. of Technology (China)
- 8285 0T **An easy approach to recognize Tibetan script by geometric features** [8285-80]
W. Zhou, L. Chen, Z. Zeng, East China Normal Univ. (China)
- 8285 0U **Performance analysis of conventional CMA and RLS in single carrier LTE uplink systems** [8285-82]
J. Reddy P, S. Kotte, G. C. Gannamaneni, K. C. Talluri, Blekinge Institute of Technology (India)
- 8285 0V **Texture compilation for example-based synthesis** [8285-85]
A. A. J., Madha Engineering College (India); J. J, Veltch Dr R.R & Dr S.R.Technical Univ. (India)
- 8285 0W **Remote sensing dynamic monitoring and driving force analysis of land use in Xinjiang regimental farm** [8285-88]
H. Yang, Q. Meng, W. Cao, X. Xu, Shi Hezi Univ. (China)
- 8285 0X **Structural damage detection in pipeline using Lamb waves and wavelet transform** [8285-92]
F. Shoeibi, A. Ebrahimi, H. B. Ghavifekr, Sahand Univ. of Technology (Iran, Islamic Republic of)
- 8285 0Y **Competitive learning based on kernel functions and quadtree for image segmentation** [8285-98]
T. Guan, Zhengzhou Institute of Aeronautic Industry Management (China); L.-L. Li, Zhengzhou Institute of Aeronautic Industry Management (China); Y.-J. Zhang, China Mobile Ltd. (China)
- 8285 0Z **Vein matching using artificial neural network in vein authentication systems** [8285-99]
A. Noori Hoshyar, R. Sulaiman, Univ. Kebangsaan Malaysia (Malaysia)
- 8285 10 **Color based properties query for CBIR: HSV global color histogram** [8285-102]
D. Md Nor, J.-M. Ogier, F. Manani, Univ. Tun Hussein Onn Malaysia (Malaysia); M. Zarar Mohamed Jenu, Univ. de La Rochelle (Malaysia)
- 8285 11 **Optimal exposure sets for high dynamic range scenes** [8285-104]
V. Valli Kumari, Andhra Univ. (India); B. RaviKiran, K. V. S. V. N. Raju, S. A. Shajahan Basha, Anil Neerukonda Institute of Technology (India)
- 8285 12 **2D image compression using concurrent wavelet transform** [8285-105]
K. H. Talukder, K. Harada, Hiroshima Univ. (Japan)
- 8285 13 **3D fabric feature extraction and defect classification using low-cost USB camera** [8285-107]
F. Akbar, H. Akbar, N. Suryana, M. Husni, Univ. Teknikal Malaysia Melaka (Malaysia)

- 8285 14 **Study on air backflow in the goaf of working face with downward ventilation** [8285-108]
J. Gao, M. Yang, Henan Polytechnic Univ. (China) and State Key Lab. Cultivation Base for Gas Geology and Gas Control (China); F. Guo, Henan Polytechnic Univ. (China)
- 8285 15 **A selective-update affine projection algorithm with selective input vectors** [8285-109]
N. Kong, J. Shin, P. Park, Pohang Univ. of Science and Technology (Korea, Republic of)
- 8285 16 **Finger tips detection for two handed gesture recognition** [8285-110]
M. K. Bhuyan, M. K. Kar, D. R. Neog, Indian Institute of Technology (India)
- 8285 17 **Wavelet analysis and high quality JPEG2000 compression using Daubechies wavelet** [8285-116]
A. Khalid, Nokia Siemens Networks (Pakistan); U. Afsheen, NED Univ. of Engineering and Technology (Pakistan); S. Umer Baig, Consultant (Pakistan)
- 8285 18 **Detection and analysis of solar eclipse** [8285-118]
S. S. Sarvesh, S. Pradeep Sundar, I. Kenny Jackson, P. Kannan, Panimalar Engineering College (India)
- 8285 19 **Lip reading using neural networks** [8285-120]
D. Kalbande, A. A. Mishra, S. Patil, S. Nirgudkar, P. Patel, Sardar Patel Institute of Technology (India)
- 8285 1A **A robust blind watermarking method using quantization of distance between wavelet coefficients** [8285-121]
S. Ghofrani, M. J. Sahraee, Islamic Azad Univ. (Iran, Islamic Republic of)
- 8285 1B **A selective review on target tracking algorithms** [8285-122]
K. S. Kaawaase, F. Chi, Harbin Engineering Univ. (China)
- 8285 1C **Novel algorithm by low complexity filter on retinal vessel segmentation** [8285-123]
S. Rostampour, Islamic Azad Univ. (Iran, Islamic Republic of)
- 8285 1D **Symbolic document image compression based on pattern matching techniques** [8285-125]
C.-Y. Shiah, Y.-S. Yen, Fo Guang Univ. (Taiwan)
- 8285 1E **Automatic estimation of rock particulate size on conveyer belt using image analysis** [8285-127]
A. Amankwah, C. Aldrich, Univ. of Stellenbosch (South Africa)
- 8285 1F **Boundary emphasis transfer function generation based on HSL color space** [8285-128]
X. Li, J. Wu, S. Luo, X. Ma, Shenzhen Institutes of Advanced Technology (China) and The Chinese Univ. of Hong Kong (China)
- 8285 1G **Partial image watermarking based on variance of neighbor pixels** [8285-129]
S. Sritapanu, T. Amornraksa, King Mongkut's Univ. of Technology Thonburi (Thailand)
- 8285 1H **Vision enhancement of line following robot using Wiener filter and morphology** [8285-130]
W. E. Elhady, October 6 Univ. (Egypt); H. A. Elnemr, Electronics Research Institute (Egypt); G. Selim, Arab Academy for Science & Technology (Egypt)

- 8285 1I **Adaptive bilateral filtering for image denoising** [8285-131]
E. Farzana, M. Tanzid, K. M. Mohsin, M. I. H. Bhuiyan, Bangladesh Univ. of Engineering and Technology (Bangladesh)
- 8285 1J **Fire flame detection using color segmentation and space-time analysis** [8285-133]
M. Ruchanurucks, P. Saengngoen, Kasetsart Univ. (Thailand); T. Sajjawiso, Chulalongkorn Univ. (Thailand)
- 8285 1K **B-spline based free form deformation thoracic non-rigid registration of CT and PET images** [8285-134]
D. Khodadad, A. Ahmadian, M. Ay, A. F. Esfahani, H. Y. Banaem, Tehran Univ. of Medical Science (Iran, Islamic Republic of); H. Zaidi, Geneva Univ. Hospital (Switzerland)
- 8285 1L **Research on improvement strategies of elite culture, mass culture and the comprehensive quality of undergraduates** [8285-135]
H. Wang, Huai'an College of Information Technology (China)
- 8285 1M **Brain tumor modeling: glioma growth and interaction with chemotherapy** [8285-140]
H. Y. Banaem, A. Ahmadian, H. Saberi, Tehran Univ. of Medical Science (Iran, Islamic Republic of); A. Daneshmehr, Univ. of Tehran (Iran, Islamic Republic of); D. Khodadad, Tehran Univ. of Medical Science (Iran, Islamic Republic of)
- 8285 1N **The establishment of shadow model based on Flash and realization of control technology** [8285-142]
J. Cai, S. Zhao, X. Yu, Beijing Univ. of Technology (China)
- 8285 1O **Research and realization of shadowgraph performance technology based on DirectX** [8285-143]
J. Cai, Q. Liu, X. Yu, Beijing Univ. of Technology (China)
- 8285 1P **A robust hierarchical video shot detection method** [8285-144]
J. Dhillon, K. Kakkirala, S. R. Chalamala, TATA Consultancy Services (India)
- 8285 1Q **Image watermarking on Gaussian low pass components ignoring edges and its neighbor pixels** [8285-145]
A. B. M. M. Morshed, T. Amornraksa, King Mongkut's Univ. of Technology Thunburi (Thailand)
- 8285 1R **Comparative study of spatial domain techniques and fuzzy intensification factor for image enhancement** [8285-146]
P. H. Bhalotra, G.H.R.C.E.M. (India); N. N. Ghuge, B. D. Shinde, M.I.T.R. (India)
- 8285 1S **Digital watermarking based on pixels modification using adaptive Gaussian filter in lab color space** [8285-148]
A. Songputtipong, T. Amornraksa, King Mongkut's Univ. of Technology Thonburi (Thailand)
- 8285 1T **An efficient iris segmentation approach** [8285-154]
A. Gomai, A. El-Zaart, H. Mathkour, King Saud Univ. (Saudi Arabia)
- 8285 1U **Sgraffito simulation through image processing** [8285-160]
R. A. Guerrero, Univ. of San Luis (Argentina); F. J. Serón Arbeloa, Univ. of Zaragoza (Spain)

- 8285 1V **Algorithm development with the integrated vision system to get the 3D location data** [8285-164]
J. Lee, M. Kim, Y. Kim, M. Park, Changwon National Univ. (Korea, Republic of)
- 8285 1W **Wyner-Ziv side information generation using a higher order piecewise trajectory temporal interpolation algorithm** [8285-167]
M. O. Akinola, L. S. Dooley, P. K. C. Wong, Open Univ. (United Kingdom)
- 8285 1X **An adaptive moving ship detection and tracking based on edge information and morphological operations** [8285-171]
N. Arshad, K.-S. Moon, J.-N. Kim, Pukyong National Univ. (Korea, Republic of)
- 8285 1Y **Obliterable of graphics and correction of skew using Hough transform for mobile captured documents** [8285-178]
H. K. Chethan, G. H. Kumar, Univ. of Mysore (India)
- 8285 1Z **A methodology for modelling and retrieving satellite images basing on spatial knowledge: application to natural risks** [8285-179]
W. Messaoudi, I. R. Farah, H. B. Ghezala, Univ. of Manouba (Tunisia); B. Solaiman, Telecom Bretagne (France)
- 8285 20 **A fast PDE algorithm using adaptive matching criterion for motion estimation** [8285-182]
J.-N. Kim, Pukyong National Univ. (Korea, Republic of)
- 8285 21 **Extraction of words from the national ID cards for automated recognition** [8285-184]
M. R. Akhter, Univ. of Liberal Arts Bangladesh (Bangladesh); M. H. Bhuiyan, Ahsanullah Univ. of Science and Technology (Bangladesh); M. S. Uddin, Jahangirnagar Univ. (Bangladesh)
- 8285 22 **Image segmentation using kernel fuzzy C-means clustering on level set method** [8285-187]
G. R. Reddy, Kakatiya Institute of Technology & Science (India); T. Saikumar, R. R. Rao, Osmania Univ. (India)
- 8285 23 **Image compression using hybrid vector quantization with DCT** [8285-188]
A. Amaar, E. M. Saad, I. Ashour, M. Elzorkany, National Telecommunication Institute (Egypt)
- 8285 24 **Activity recognition based on event probability sequence and key point detecting** [8285-189]
X. Li, Y. Yang, Sun Yat-sen Univ. (China)
- 8285 25 **Empirical study on neural network based predictive techniques for automatic number plate recognition** [8285-190]
M. S. Shashidhara, The Oxford College of Engineering (India); S. S. Indrakumar, Consona Software India Pvt. Ltd. (India)
- 8285 26 **Energy conservation using face detection** [8285-193]
N. T. Deotale, Lokmanya Tilak College of Engineering (India); D. R. Kalbande, A. A. Mishra, Sardar Patel Institute of Technology (India)
- 8285 27 **Image resolution enhancement using error estimation** [8285-194]
W.-H. Kim, J.-N. Kim, Pukyong National Univ. (Korea, Republic of)

- 8285 28 **An adaptive total variation model with local constraints for denoising partially textured images** [8285-198]
A. A. Bini, M. S. Bhat, P. Jidesh, National Institute of Technology (India)
- 8285 29 **A study on modulation and demodulation of microwave measurement signal** [8285-243]
Y. Yu, Y. Wan, Shenyang Univ. of Technology (China)
- 8285 2A **The present status and development of acoustic emission technique in diagnosis of rotating machinery faults** [8285-244]
Y. Yu, P. Yang, Shenyang Univ. of Technology (China)
- 8285 2B **Adaptive VFH** [8285-245]
I. Odiozola, E. Lazkano, B. Sierra, Univ. of the Basque Country (Spain)
- 8285 2C **Image retargeting using non-uniform scaling with adaptive local search window** [8285-246]
S. Wang, A. Abdel-Dayem, Laurentian Univ. (Canada)
- 8285 2D **A study of the key technology of IEEE802.11p-2010** [8285-247]
L. Hu, Univ. of Shanghai (China) and Leibniz Univ. Hannover (Germany); T. Kaiser, C. Kupferschmidt, H. Nguyen, Leibniz Univ. Hannover (Germany); H. Jing, Hunan Univ. (China)
- 8285 2E **A novel surveillance system for rescue and military operations** [8285-248]
Y. T. Win, M. W. Ashraf, N. Afzulpurkar, S. Tayyaba, Asian Institute of Technology (Thailand); H. T. Htun, Sercel Singapore Pte. Ltd. (Singapore); C. Punyasai, National Electronics and Computer Technology Ctr. (Thailand)
- 8285 2F **Interference of urban spatial evolution to wetland ecosystem** [8285-249]
J. Dai, B. Fan, J. Wang, Y. Wang, Changjiang River Scientific Research Institute (China)
- 8285 2G **A hybrid de-noising method based on wavelet and median filter for aero-engines gas path electrostatic monitoring** [8285-250]
Z. Wen, Zhengzhou Institute of Aeronautical Industry Management (China); X. Zhao, Zhengzhou Univ. (China)
- 8285 2H **A new video codec based on 3D-DTCWT and vector SPIHT** [8285-251]
R. Xu, H. Li, S. Xie, Northwestern Polytechnical Univ. (China)
- 8285 2I **The motion detection of video using active surface and particle swarm optimization** [8285-252]
R. Xu, H. Li, Q. Wen, Northwestern Polytechnical Univ. (China)
- 8285 2J **Detecting unintended gesture in real-time video for mental state prediction** [8285-253]
A. Hussain, N. Afzulpur, M. W. Ashraf, S. Tayyaba, Asian Institute of Technology (Thailand); A. R. Abbasi, Karachi Institute of Power Engineering (Pakistan)
- 8285 2K **Realization of ActiveX control based on ATL in VC 2008** [8285-254]
S. Li, Y. Tie, Inner Mongolia Univ. (China)
- 8285 2L **A traffic accident scene swift reconnaissance system of vision** [8285-255]
Z. Xu, X. Xu, Z. Yu, Civil Aviation Univ. of China (China)

- 8285 2M **The fault diagnosis of large-scale wind turbine based on expert system** [8285-256]
C. Chen, Y. Li, Shenyang Univ. of Technology (China)
- 8285 2N **Research on fuzzy robust adaptive unscented particle filtering** [8285-257]
Y. Gao, S. Gao, Northwestern Polytechnical Univ. (China)
- 8285 2O **Risk evaluation of highway engineering project based on the fuzzy-AHP** [8285-258]
Q. Yang, Shijiazhuang Tiedao Univ. (China); Y. Wei, North China Electric Power Univ. (China)
- 8285 2P **Study on project schedule management based on comprehensive comparison methods** [8285-259]
J. Ge, Shijiazhuang Tiedao Univ. (China)
- 8285 2Q **Research on the frequency hopping bistatic sonar system** [8285-260]
G. Liang, Y. Zhang, G. Zhang, K. Liu, Harbin Engineering Univ. (China)
- 8285 2R **Photoplethysmogram reflection index and aging** [8285-261]
Y. K. Qawqzeh, M. B. I. Reaz, O. Maskon, K. Chellappan, M. A. M. Ali, Univ. Kebangsaan Malaysia (Malaysia)
- 8285 2S **Hardware accelerator design for tracking in smart camera** [8285-262]
S. Singh, S. M. Dunga, R. Saini, A. S. Mandal, C. Shekhar, Central Electronics Engineering Research Institute (India); A. Vohra, Kurukshetra Univ. (India)

Part Two

- 8285 2T **Hardware accelerator design for change detection in smart camera** [8285-263]
S. Singh, S. M. Dunga, R. Saini, A. S. Mandal, C. Shekhar, Central Electronics Engineering Research Institute (India); S. Chaudhury, Indian Institute of Technology Delhi (India); A. Vohra, Kurukshetra Univ. (India)
- 8285 2U **Large-scale MOSFET and interconnect circuit simulation using iterated timing analysis and transmission line time step control** [8285-264]
C.-J. Chen, Chinese Culture Univ. (Taiwan)
- 8285 2V **Incremental circuit simulation for MOSFET circuits by using iterated timing analysis algorithm** [8285-265]
C.-J. Chen, Chinese Culture Univ. (Taiwan)
- 8285 2W **Duplication-remove algorithm of image based on EZW-based matrix bloom filter** [8285-266]
Y. Che, X. Fei, B. Hu, Sichuan Univ. (China)
- 8285 2X **An efficient approach to crack detecting based on matched filtering** [8285-267]
X. Xie, Y. Wang, NAAU (China)
- 8285 2Y **Null broadening for multistage nested Wiener filter on the joint space-time GPS receiver** [8285-268]
D. Xu, S. Wu, G. Yu, Beijing Institute of Technology (China)

- 8285 2Z **Study on the mobile-internet-oriented streaming media technology** [8285-269]
S. Fu, S. Gong, Z. Chen, Ningbo Univ. (China)
- 8285 30 **The study of the developing model of the rural timeshare tourism** [8285-270]
Z. Xu, B. Tang, Zhejiang Univ. of Technology (China)
- 8285 31 **Objective quality assessment of HD video based on compressed domain** [8285-271]
R. Song, X. Jiang, H. Shi, Communication Univ. of China (China)
- 8285 32 **Brain tumor segmentation in 3D MRIs using an improved Markov random field model**
[8285-272]
S. Yousefi, R. Azmi, M. Zahedi, Shahrood Univ. of Technology (Iran, Islamic Republic of)
- 8285 33 **A real-time receive method of wideband radar based on subband pulse compression**
[8285-273]
M. Li, W. Fu, P. Zhang, Y. Wu, Xidian Univ. (China)
- 8285 34 **A high efficient range ambiguity resolution algorithm for PD radar base on one-dimensional set** [8285-274]
M. Li, M. Li, L. Zuo, Xidian Univ. (China)
- 8285 35 **The research of .NET framework based on delegate of the LCE** [8285-275]
Y. Chen, Changsha Commerce & Tourism College (China)
- 8285 36 **A new chirp scaling algorithm of bistatic SAR with parallel flight paths** [8285-276]
N. Li, L. Wang, National Univ. of Defense Technology (China)
- 8285 37 **A hybrid propagation model using the detailed irregularities terrain profile data** [8285-277]
X. Wang, Imperial College London (United Kingdom); J. Hao, Univ. of Bristol (United Kingdom)
- 8285 38 **Study on information strategic planning for large and medium-sized enterprise** [8285-279]
M. Chen, S. Tan, Hunan Industry Polytechnic (China)
- 8285 39 **Two novel methods for juxta-pleural nodule segmentation based on CT images** [8285-280]
S. Qi, G. Si, H. van Triest, Northeastern Univ. (China); Y. Yue, Shengjing Hospital of China Medical Univ. (China)
- 8285 3A **Simulation optimization as a method for lot size determination** [8285-281]
P. Važan, O. Moravčík, D. Jurovátá, A. Juráková, Slovak Univ. of Technology (Slovakia)
- 8285 3B **Survey of business process simulation tools: a comparative approach** [8285-282]
I. Imam, N. Nounou, A. Hamouda, H. A. Abdul Khalek, Arab Academy for Science, Technology & Maritime Transport (Egypt)
- 8285 3C **An optimal setup planning selection approach in a complex product machining process**
[8285-283]
F. Zhu, Wuhan Univ. of Technology (China)

- 8285 3D **Developing and promoting OKP production system: a JIT production planning approach** [8285-284]
M. Samavati, Tabriz Univ. (Iran, Islamic Republic of)
- 8285 3E **Integrating analytic hierarchy process with integer programming to efficiently model spectrum demands** [8285-285]
R. Ramli, F. Jamaluddin, E. M. N. E. A. Bakar, Univ. Utara Malaysia (Malaysia); M. Y. Alias, Multimedia Univ. (Malaysia); N. I. Mahat, M. Z. Abdul Karim, A. C. Leng, Univ. Utara Malaysia (Malaysia)
- 8285 3F **Evaluation on color spaces and distance measures for color histogram-based image retrieval** [8285-286]
X. Zhao, Y. Chen, Tsinghua Univ. (China)
- 8285 3G **Operations dashboard: comparative study** [8285-287]
N. N. Ramly, A. Z. Ismail, M. H. Aziz, N. H. Ahmad, MIMOS Berhad (Malaysia)
- 8285 3H **Modeling and analysis of web portals performance** [8285-288]
R. Abdul Rahim, H. Ibrahim, S. S. Syed Yahaya, Univ. Utara Malaysia (Malaysia); K. Khalid, Management Science Univ. (Malaysia)
- 8285 3I **Enhancing the (MSLDIP) image steganographic method (ESLDIP method)** [8285-289]
A.-H. Seddik Saad, The Higher Institute for Engineering and Technology (Egypt)
- 8285 3J **Output-feedback MRAC of networked control systems with network-induced delay** [8285-290]
A. H. Tahoun, Tanta Univ. (Egypt)
- 8285 3K **Blotch removal for old movie restoration using epitome analysis** [8285-291]
A. M. Rashwan, Cairo Univ. (Egypt) and The Engineering Co. for the Development of Computer Systems (Egypt)
- 8285 3L **Application of Choquet integral in solving multi-attribute decision making problems** [8285-293]
A. R. Krishnan, M. Mat Kasim, E. M. N. Engku Abu Bakar, Univ. Utara Malaysia (Malaysia)
- 8285 3M **Modeling and optimization of an elastic arthroplastic disc for a degenerated disc** [8285-294]
A. Ghouchani, Amirkabir Univ. of Technology (Iran, Islamic Republic of); M. Ravari, Islamic Azad Univ. (Iran, Islamic Republic of); F. Mahmoudi, Amirkabir Univ. of Technology (Iran, Islamic Republic of)
- 8285 3N **Identifying faces based on three-dimensional geometrical properties from a single 2D line drawing** [8285-295]
X. Du, L. Yi, Shandong Univ. of Science and Technology (China)
- 8285 3O **Stereo vision-based obstacle detection using dense disparity map** [8285-296]
C.-H. Lee, Y.-C. Lim, S. Kwon, J. Kim, Daegu Gyeongbuk Institute of Science & Technology (Korea, Republic of)

- 8285 3P **A new method of cardiographic image segmentation based on grammar** [8285-297]
S. Hamdi, National Engineering School of Sfax (Tunisia); A. Ben Abdallah, M. H. Bedoui, Faculty of Medicine of Monastir (Tunisia); A. M. Alimi, National Engineering School of Sfax (Tunisia)
- 8285 3Q **Oil fuel delivery optimization for multi product and multi depot: the case of petrol station replenishment problem (PSRP)** [8285-298]
I. Surjandari, A. Rachman, F. Dianawati, Univ. of Indonesia (Indonesia); R. P. Wibowo, PT Pertamina (Indonesia)
- 8285 3R **A new color space to discriminate skin regions using fuzzy quadratic programming** [8285-299]
A. Mazaherie, Tarbiat Modares Univ. (Iran, Islamic Republic of); S. Mirghasemi, M. Lotfizad, Islamic Azad Univ. (Iran, Islamic Republic of)
- 8285 3S **Automatic image registration algorithm based on improved Harris corner detection** [8285-301]
T. Zhang, Y. Mei, Beijing Institute of Technology (China)
- 8285 3T **Region grow approach to detect anomalous shapes of spread of cell transformations from radiological images** [8285-302]
T. R. G. Nair, Dayananda Sagar College of Engineering (India); R. Sharma, The Oxford College of Engineering (India)
- 8285 3U **Strategic network design of Java Island fuel supply with production-transportation solution** [8285-303]
F. Dianawati, Farizal, I. Surjandarim, R. Marzuli, Univ. of Indonesia (Indonesia)
- 8285 3V **Modeling and optimization of cylindrical wire electro discharge machining of AISI D3 tool steel using non-dominated sorting genetic algorithm** [8285-304]
A. Golshan, Isfahan Univ. of Technology (Iran, Islamic Republic of); S. Gohari, A. Ayob, Univ. Teknologi Malaysia (Malaysia)
- 8285 3W **Human age estimation using extended Gabor like-features** [8285-305]
M. Y. El Dib, B. S. Abou Zaid, Cairo Univ. (Egypt)
- 8285 3X **Blurriness measurement in frequency domain for image quality assessment** [8285-306]
Q. M. Tahir, Univ. of Essex (United Kingdom); M. S. Noman, A. Tahir, Sir Syed Univ. of Engineering & Technology (Pakistan)
- 8285 3Y **A novel FFT/IFFT based peak-to-average power reduction method for OFDM communication systems using tone reservation** [8285-11]
S. O. Besong, X. Yu, B. Li, Hunan Univ. (China); W. Hou, Univ. of Shenzhen (China); X. Wang, The 3rd Research Institute Academy of Air Force Equipments (China)
- 8285 3Z **A time-frequency algorithm for noisy BSS model** [8285-34]
J. Guo, Southwest Univ. Chongqing (China); X.-P. Zeng, Chongqing Univ. (China)

- 8285 40 **Construction of sequences with three-valued zero correlation zone for multi-carrier CDMA systems** [8285-36]
Z. Zhang, Chongqing Univ. (China) and Chongqing Communication Institute (China);
F. Zeng, H. Pu, G. Xuan, Chongqing Communication Institute (China)
- 8285 41 **An efficient and effective video similarity search method** [8285-37]
L. Zhu, Anhui Electric Power Jiyuan Software Co. Ltd. (China); Z. Li, Z. Cao, The Key Lab. of
Network Communication System & Control (China)
- 8285 42 **Application of penalized least-squares algorithm in PET image reconstruction based a nonlocal quadratic prior** [8285-38]
Z. Gui, J. He, X. Ma, North Univ. of China (China)
- 8285 43 **Low bit-rate image compression via discrete wavelet transform and classified vector quantization** [8285-39]
H. Guo, B. Zhao, Beijing Institute of Technology (China)
- 8285 44 **Improved demodulator for deep space communication** [8285-40]
X. Pan, Beijing Institute of Technology (China); X. Li, Beijing Research Institute of Telemetry
(China)
- 8285 45 **A DSP implementation of lifting based DWT for image processing applications** [8285-41]
M. Gholipour, Univ. of Tehran (Iran, Islamic Republic of); H. A. Noubari, Univ. of British
Columbia (Canada); M. Kamarei, Univ. of Tehran (Iran, Islamic Republic of)
- 8285 46 **Study on sparse blinding separation based on the linear detection and STFT** [8285-42]
H. Yang, X. Wang, Anhui Polytechnic Univ. (China)
- 8285 47 **Biomedical image and signal de-noising using dual tree complex wavelet transform**
[8285-46]
F. Y. Rizi, H. A. Noubari, S. K. Setarehdan, Univ. of Tehran (Iran, Islamic Republic of)
- 8285 48 **A hybrid table look-up method for H.264/AVC coeff_token decoding** [8285-49]
S. Liu, Y. Zhang, M. Lu, B. Tang, Xiamen Univ. (China)
- 8285 49 **A note on mixture bivariate model** [8285-50]
H. Cao, W. Tian, C. Deng, Nanchang Institute of Technology (China)
- 8285 4A **Simple and efficient remote sensing image transformation for lossless compression**
[8285-51]
F. Sepehrband, Sharif Univ. of Technology (Iran, Islamic Republic of); P. Ghamisi, K.N.Toosi
Univ. of Technology (Iran, Islamic Republic of); M. Mortazavi, J. Choupan, Sharif Univ. of
Technology (Iran, Islamic Republic of)
- 8285 4B **Data-aided Doppler shift estimation for TD-SCDMA system over Rician** [8285-52]
J. Wang, J. Teng, Y. Cui, Tianjin Univ. (China); X. Ma, Tianjin Univ. of Technology (China)
- 8285 4C **Quality of Arabic utterances transformed using different residual prediction techniques**
[8285-53]
R. Elmanfaloty, N. Korany, E.-S. A. Youssef, Alexandria Univ. (Egypt)

- 8285 4D **DICOM restoration based on Wiener filtering tight framelet algorithm** [8285-54]
Y. Jiang, J. Zhang, Guilin Univ. of Electronic Technology (China)
- 8285 4E **Frequency offset estimation in OFDM systems using Bayesian filtering** [8285-55]
Y. Yu, School of Science Beijing Univ. of Posts and Telecommunications (China)
- 8285 4F **Static hand gesture recognition from a video** [8285-56]
R. S. Rokade, D. Doye, SGGS Institute of Engineering and Technology (India)
- 8285 4G **Adaptive rate selection scheme for video transmission to resolve IEEE 802.11 performance anomaly** [8285-57]
G. Tang, X. Zhu, Nanjing Univ. of Posts and Telecommunications (China)
- 8285 4H **Melancholia EEG classification based on CSSD and SVM** [8285-58]
J.-J. Shi, Q.-W. Yuan, Hunan Vocational College of Railway Technology (China); L.-W. Zhou, Hunan Univ. (China)
- 8285 4I **Application of EMD of well-logging data on demarcating stratigraphic sequence** [8285-59]
L. Yan, Z. Liu, S. Fang, Jilin Univ. (China)
- 8285 4J **A novel method for host risk assessment based on predecessor attack** [8285-60]
X. Zhang, L. Huang, C. Xu, T. Chen, Univ. of Electronic Science and Technology of China (China)
- 8285 4K **Non-invasive monitoring method for thermal ablation therapy based on UBE** [8285-61]
J.-J. Shi, Q.-W. Yuan, Hunan Vocational College of Railway Technology (China); L.-W. Zhou, Hunan Univ. (China)
- 8285 4L **Realization of the imaging-auto-focus on the APRC using splicing-CCD** [8285-62]
Z. Lu, Changchun Institute of Optics, Fine Mechanics and Physics (China) and Graduate Univ. of the Chinese Academy of Sciences (China); Y. Guo, X. Xue, T. Ma, H. Lv, Changchun Institute of Optics, Fine Mechanics and Physics (China)
- 8285 4M **The portable smog analyzed instrument based on the arm** [8285-67]
X.-H. Su, C. Li, S.-P. Xu, Xi'an Technological Univ. (China)
- 8285 4N **Time-domain compact range measurement system for radar targets** [8285-68]
G. Li, J. Liu, P. Liu, J. He, National Univ. of Defense Technology (China)
- 8285 4O **Design and optimization of an X-band waveguide aperture antenna** [8285-69]
G. Li, Z. Lu, H. Wang, J. He, National Univ. of Defense Technology (China)
- 8285 4P **Gaussian mass optimization for kernel PCA parameters** [8285-70]
Y. Liu, Z. Wang, Beihang Univ. (China)
- 8285 4Q **Quantitative approach in treatment of tinnitus by acoustical stimulation** [8285-72]
M. Banimostafa, H. Sadjedi, Science and Research Univ. (Iran, Islamic Republic of)
- 8285 4R **Image inpainting using cubic hermit spline** [8285-74]
M. S. Farid, H. Khan, A. Mahmood, Univ. of the Punjab (Pakistan)

- 8285 4S **Optimization of parameters for cooperative spectrum sensing in cognitive radio networks** [8285-77]
Q. Sun, N. Hu, Z. Ye, Univ. of Science and Technology of China (China)
- 8285 4T **Discrete Walsh Hadamard transform based visible watermarking technique for digital color images** [8285-78]
V. Santhi, A. Thangavelu, VIT Univ. Vellore (India)
- 8285 4U **A simulator for depicting and comparing adaptive algorithms in signal processing** [8285-81]
S. Maddala, Blekinge Institute of Technology (India); S. Kumar Reddy B, Nalanda Institute of Engineering and Technology Kantepudi (India)
- 8285 4V **Pilot-aided channel estimation in cooperative SFBC-OFDM networks** [8285-83]
M. A. B. Othman, M. H. Ismail, M. S. El-Soudani, Cairo Univ. (Egypt)
- 8285 4W **Algorithm for symbol rate estimation of MFSK** [8285-84]
J. Xu, F. Wang, Z. Wang, Tsinghua Univ. (China)
- 8285 4X **A new method of comb spectrum signal generating based on Morlet wavelet** [8285-86]
M. Wang, B. Bai, X. Zeng, Nanjing Telecommunication Technology Institute (China)
- 8285 4Y **A study of speech emotion recognition based on hybrid algorithm** [8285-87]
J. Zhu, C. Zhang, Z. Lv, Y. Rao, X. Wu, Anhui Univ. (China)
- 8285 4Z **Automatic face detection and tracking based on Adaboost with camshift algorithm** [8285-89]
H. Lin, J. Long, Hunan Univ. (China)
- 8285 50 **An improved method of monopulse estimation in PD radar** [8285-90]
J. Wang, P. Guo, P. Lei, S. Wei, Beihang Univ. (China)
- 8285 51 **Using OSL-SVM for the concentration prediction of 4-CBA** [8285-91]
Y. Fan, Kunming Univ. of Science and Technology (China); H. Wang, Kunming Univ. of Science and Technology (China) and Ministry of Education (China); J. Wu, Kunming Univ. of Science and Technology (China)
- 8285 52 **A new CFAR detector based on PDF estimation of clutter using maximum entropy method** [8285-93]
J. Li, X. Wang, T. Wang, National Univ. of Defense Technology (China)
- 8285 53 **Research of SoPC-based improved genetic algorithm on shortest path** [8285-94]
H. Ruan, A. Ren, M. Meng, W. Zhao, M. Luo, Xidian Univ. (China)
- 8285 54 **An analysis and algorithm for unknown altitude source geo-location using TDOA measurements in the presence of receiver location errors** [8285-95]
H. Wu, H. Xiong, J. Peng, National Univ. of Defense Technology (China)
- 8285 55 **ISAR range alignment methods based on statistical property of range profile** [8285-96]
Y. Lin, W. Chen, Z. Yin, Y. Yang, Univ. of Science and Technology of China (China)

- 8285 56 **Realization complexity of a Viterbi decoder for a partial response equalized magnetic channel** [8285-97]
J.-S. Hsiao, Lee-Ming Institute of Technology (Taiwan); H.-H. Ku, Hwa-Hsia Institute of Technology (Taiwan); C.-H. Chen, China Univ. of Technology (Taiwan); T.-S. Kao, Hwa-Hsia Institute of Technology (Taiwan)
- 8285 57 **Genetic algorithm for feature selection of MR brain images using wavelet co-occurrence** [8285-100]
A. Kharrat, Univ. of Sfax (Tunisia); N. Benamrane, Vision and Medical Imagery Lab. (Algeria); M. B. Messaoud, M. Abid, Univ. of Sfax (Tunisia)
- 8285 58 **Analysis of orthogonal waveform for spaceborne MIMO-GMTI radar** [8285-101]
B. Zou, Z. Dong, X. Du, National Univ. of Defense Technology (China)
- 8285 59 **A modify SSB full-duplex millimeter-wave radio-over-fiber system based on multiplication technology** [8285-103]
L. Zhang, X. Chen, R. Li, M. Bai, Communication Univ. of China (China)
- 8285 5A **Theoretical analysis and emulational experiment of modal dispersion in radio over multimode fiber links based on optical frequency multiplication** [8285-106]
X. Chen, M. Bai, R. Li, L. Zhang, Communication Univ. of China (China)
- 8285 5B **Adaptive impulsive noise suppression for ISDB-T receivers** [8285-111]
Z. Ma, R. Miyamoto, M. Okada, Nara Institute of Science and Technology (Japan)
- 8285 5C **A novel speech watermarking algorithm by line spectrum pair modification** [8285-112]
Q. Zhang, S. Yang, G. Chen, Xi'an Communications Institute Xi'an (China); J. Zhou, Army Aviation Research Institute (China)
- 8285 5D **A robust MVDR beamforming based on covariance matrix reconstruction** [8285-113]
P. Mu, D. Li, Q. Yin, Xi'an Jiaotong Univ. (China)
- 8285 5E **A physical layer secure wireless communication method using random antenna switching** [8285-114]
P. Mu, Q. Yin, Xi'an Jiaotong Univ. (China)

Part Three

- 8285 5F **Comparison study between dyadic wavelet transform and modified higher order moment** [8285-115]
J. Choupan, S. Ghorshi, M. Mortazavi, F. Sepehrband, Sharif Univ. of Technology (Iran, Islamic Republic of)
- 8285 5G **A modify ant colony optimization for the grid jobs scheduling problem with QoS requirements** [8285-117]
X. Pu, Univ. of Electronic Science and Technology of China (China) and Southwest Univ. (China); X. Lu, Univ. of Electronic Science and Technology of China (China)

- 8285 5H **Strategy for incumbent wireline operator: customers' provision of broadband wireless access** [8285-119]
N. A. Khan, K. Kan, A. W. Tareen, Beijing Univ. of Posts and Telecommunications (China)
- 8285 5I **Cognitive routing system for mobile ad hoc networks** [8285-124]
A. Ali, H. Wang, G. Feng, Harbin Engineering Univ. (China)
- 8285 5J **InSAR DEM error modeling and calibration** [8285-126]
Y. Zhang, H. Huang, Y. Zhang, D. Liang, National Univ. of Defense Technology (China)
- 8285 5K **A VLSI architecture for real-time signal FFT based on pipelined processing element** [8285-132]
X. Wang, Y. Zhang, J. Wang, Harbin Institute of Technology (China)
- 8285 5L **Estimation of base station position using timing advance measurements** [8285-137]
M. Raitoharju, S. Ali-Löytty, Tampere Univ. of Technology (Finland); L. Wirolo, Nokia Inc. (United States)
- 8285 5M **Cover song identification by sequence alignment algorithms** [8285-138]
C.-L. Wang, Q. Zhong, Univ. of California, Los Angeles (United States); S.-Y. Wang, NHCUE (Taiwan); V. Roychowdhury, Univ. of California, Los Angeles (United States)
- 8285 5N **SCOPES: steganography with compression using permutation search** [8285-139]
S. Boorboor, Islamic Azad Univ. (Iran, Islamic Republic of); B. Zolfaghari, S. P. Mozafari, AmirKabir Univ. of Technology (Iran, Islamic Republic of)
- 8285 5O **A fast InSAR raw signal simulation based on GPGPU** [8285-141]
Z. He, A. Yu, F. He, D. Liang, National Univ. of Defense Technology (China)
- 8285 5P **Fusion of panchromatic and multispectral images using B-spline tight frame** [8285-147]
X. Gao, Beijing Institute of Technology (China); B. Li, Xiangtan Univ. (China)
- 8285 5Q **Research of web text fuzzy classification algorithm based on fuzzy comprehensive weighted evaluation reasoning** [8285-149]
D. Li, X. Dai, Hunan Agricultural Univ. (China)
- 8285 5R **On spectral aliasing of the fan-chirp transform** [8285-150]
H. Wu, Soochow Univ. (China)
- 8285 5S **Scheduling schemes for two-user two-way wireless relay networks** [8285-151]
Z. Fang, G. Li, Zhejiang Wanli Univ. (China); X. Zhou, Fudan Univ. (China)
- 8285 5T **A low-complexity method to generate delay power profile in wideband high frequency channel simulator** [8285-152]
Y. Liu, J. Chen, Y. Zhang, The PLA Univ. of Science and Technology (China)
- 8285 5U **Locally optimum detector for MIMO radar in non-Gaussian clutter** [8285-153]
X. Zhu, S. Wang, Wuhan Radar Institute (China)

- 8285 5V **Threshold setting model for the set partitioning in hierarchical trees (SPIHT) for audio** [8285-155]
S. V. Sondur, National Institute of Technology Karnataka (India)
- 8285 5W **Realization of multi-layer occlusion algorithm in augmented reality** [8285-156]
J. Zhang, Renmin Univ. of China (China)
- 8285 5X **Generalization of RF power amplifiers' behavioral model using memory polynomial/Volterra series** [8285-157]
H. Wang, G.-S. Li, P.-G. Liu, National Univ. of Defense Technology (China)
- 8285 5Y **Research on information of electric field in lightning warning based on empirical mode decomposition** [8285-158]
B. Wang, Y. Jiang, X. Zhao, Chengdu Univ. of Information Technology (China)
- 8285 5Z **Reconstruction of the plenacoustic function using compressive sampling** [8285-159]
H. Xia, R. Ying, L. Zhou, Shanghai Jiao Tong Univ. (China)
- 8285 60 **A self-training listwise method for learning to rank with partially labeled data** [8285-161]
H. He, Changsha Univ. (China)
- 8285 61 **Blind separation of multi-Gaussian sources using B-distribution** [8285-162]
J. Guo, Southwest Univ. (China) and Chongqing Univ. (China); Y. Deng, Southwest Univ. (China)
- 8285 62 **Study of algorithms for selecting effective network traffic monitors based on cover ratio** [8285-163]
G. Chen, Y. Yang, Henan Key Lab. of Information Security (China)
- 8285 63 **MPEG-4 video compression optimization research** [8285-165]
X. Wei, Weifang Univ. (China)
- 8285 64 **RSA cipher algorithm improvements and VC programming realization** [8285-166]
X. Wei, Weifang Univ. (China)
- 8285 65 **A humming retrieval system based on music fingerprint** [8285-168]
X. Han, B. Cao, Harbin Institute of Technology (China)
- 8285 66 **Intelligent card processing terminal of urban rail transit in Nanjing** [8285-169]
D. Xia, Panda Electronics Group Co. (China); X. Zhang, Y. Song, T. He, Southeast Univ. (China)
- 8285 67 **Improved MFCC algorithm in speaker recognition system** [8285-170]
Y. Shi, L. Wang, Guizhou Univ. (China)
- 8285 68 **Decryption-decompression of AES protected ZIP files on GPUs** [8285-172]
T. N. Duong, P. H. Pham, D. H. Nguyen, T. T. Nguyen, H. D. Le, Hanoi Univ. of Technology (Viet Nam)

- 8285 69 **Premature ventricular contraction (PVC) classifications by probabilistic neural network (PNN) using the optimal mother wavelets** [8285-173]
N. A. b. Amir Hamzah, R. b. Besar, N. Z. b. Abdul Rahman, Multimedia Univ. (Malaysia)
- 8285 6A **Synchronization of chaotic signals using sliding mode control method** [8285-174]
X. Li, J. Gu, Y. Wang, T. Zhao, Northwestern Polytechnical Univ. (China)
- 8285 6B **Temporally consistent depth map estimation based on 3D-MRF** [8285-175]
L. Yao, D. Li, M. Zhang, Zhejiang Univ. (China) and Zhejiang Provincial Key Lab. of Information Network Technology (China)
- 8285 6C **Recognition of faces using texture-based principal component analysis and Grassmannian distances analysis** [8285-176]
B. Ma, H. Zhang, Xidian Univ. (China)
- 8285 6D **Study on the initial value for the exterior orientation of the mobile version** [8285-177]
Z. Yu, S. Li, Civil Aviation Univ. of China (China)
- 8285 6E **Combination of fractional Brownian random field and lacunarity for iris recognition** [8285-180]
K. Liu, W. Zhou, Y. Wang, Shandong Univ. (China)
- 8285 6F **New method of SOC clock design based on hierarchical mode** [8285-181]
D. Wang, Wuhan Institute of Technology (China)
- 8285 6G **Side-lobe interference suppression for DFT filter banks based on improved GSC** [8285-183]
G. Li, T. Li, C. Lu, Naval Aeronautics and Astronautics Univ. (China)
- 8285 6H **Automobile GPS gyro INS enhancement** [8285-185]
R. Chen, O2Micro, Co. Ltd. (China)
- 8285 6I **Howling canceling for high gain speakerphone systems exploiting the loudspeaker redundancy** [8285-186]
J. Zhang, Q. Yin, P. Mu, T. Song, W. Wang, J. Wu, Xi'an Jiaotong Univ. (China)
- 8285 6J **E-field probe based on fiber transmission** [8285-191]
C. Fang, J. Lin, G. Zhu, Communication Univ. of China (China)
- 8285 6K **Enhance cognitive radar security by designing optimal waveform** [8285-192]
S. Wang, J. Wang, Tsinghua Univ. (China); J. Chen, Univ. of California, Los Angeles (United States); X. Shan, Tsinghua Univ. (China)
- 8285 6L **Spectrum analysis of speech recognition via discrete Tchebichef transform** [8285-195]
F. Ernawan, Univ. Dian Nuswantoro (Indonesia); N. A. Abu, N. Suryana, Univ. Teknikal Malaysia (Malaysia)
- 8285 6M **Research of three level match method about semantic web service based on ontology** [8285-196]
J. Xiao, F. Cai, Changsha Univ. (China)

- 8285 6N **The training measure and empirical study on using the product design theory to analyze the college students' employed ability** [8285-197]
Z. Bai, W. Liu, H. Shan, H. Bi, Hebei Univ. of Technology (China)
- 8285 6O **An accelerated random coordinate descent algorithm for compressed sensing** [8285-199]
D. Chen, N. Zhang, Wuhan Univ. of Science and Technology (China)
- 8285 6P **B-spline design of digital FIR filter using evolutionary computation techniques** [8285-200]
M. Swain, Silicon Institute of Technology (India); R. Panda, VSSUT (India)
- 8285 6Q **A segmentation algorithm of intracranial hemorrhage CT image** [8285-201]
H. Wang, Z. Chen, J. Wang, Mudanjiang Medical Univ. (China)
- 8285 6R **Improved DUET for underdetermined blind source separation** [8285-202]
F. Gao, G. Sun, South China Univ. of Technology (China); M. Xiao, South China Univ. of Technology (China) and Guangdong Univ. of Petrochemical Technology (China)
- 8285 6S **Comparison of IK, SISIM and SNESIM in reconstructing 2D porous media** [8285-203]
Y. Wang, J. Liu, Zhejiang Univ. of Media and Communications (China); T. Zhang, Science and Technology on Information Systems Engineering Lab. (China)
- 8285 6T **A new chaotic system and its chaotic control** [8285-204]
H. Zhu, Huaiyin Institute of Technology (China)
- 8285 6U **Underdetermined blind source separation based on fuzzy C-means clustering and sparse representation** [8285-205]
C. Zhang, C. Zheng, Harbin Engineering Univ. (China)
- 8285 6V **An improved method of video text detection** [8285-206]
H. Liu, Hebei Univ. (China); W. Yuan, Hebei Godsend High-Tech Co., Ltd. (China)
- 8285 6W **Variable step-size multi-modulus algorithm with quantized error method** [8285-207]
J. Zhou, P. Liu, Academy of Opto-Electronics, Graduate Univ. (China); S. Cao, S. Zhang, Beijing Trans-Universe Space Technology Co., Ltd. (China)
- 8285 6X **Rapid testing and identification of actuator using dSPACE real-time emulator** [8285-208]
D. Xie, Z. Wang, Q. Zeng, National Univ. of Defense Technology (China)
- 8285 6Y **Several small-scale vector array performance analysis and simulation of DOA estimation** [8285-209]
Y. Mei, North Univ. of China (China)
- 8285 6Z **Automatic video mosaicing using hierarchical compositing** [8285-210]
S. A. Hoseini, S. Jafari, Shiraz Univ. (Iran, Islamic Republic of)
- 8285 70 **Image denoising using Bayesian shrink threshold based on weighted adaptive directional lifting wavelet transform** [8285-211]
Q. Liu, L. Ni, Univ. of Science and Technology of China (China)

- 8285 71 **A fingerprint inpainting technique using improved partial differential equation methods** [8285-212]
X. Yang, D. Wang, Z. Yang, Harbin Engineering Univ. (China)
- 8285 72 **Edge detection based on genetic algorithm and sobel operator in image** [8285-213]
X. Tong, A. Ren, H. Zhang, H. Ruan, M. Luo, Xidian Univ. (China)
- 8285 73 **A multiple channel assignment algorithm and routing protocol base on wireless mesh networks** [8285-214]
X. Shi, N. Li, Wuhan Univ. (China)
- 8285 74 **L-shaped 2D DOA estimation using blind source separation** [8285-215]
Z. H. Hu, F. He, J. B. Zhu, National Univ. of Defense Technology (China)
- 8285 75 **Image super-resolution based on compressive sensing** [8285-216]
Y. Gu, X. Zhu, Nanjing Univ. of Posts and Telecommunications (China)
- 8285 76 **The assessment of SDH optical transmission equipment based on analytic hierarchy process** [8285-217]
S. Hu, F. Qi, Beijing Univ. of Posts and Telecommunications (China)
- 8285 77 **Denoising ECG signal based on ensemble empirical mode decomposition** [8285-218]
Z. Zhao, J. Liu, S. Wang, Hangzhou Dianzi Univ. (China)
- 8285 78 **Differential evolution based on hybrid crossover operators** [8285-219]
L. Yang, Wuhan Polytechnic Univ. (China); L. Zhou, M. Yu, Wuhan Univ. of Technology (China)
- 8285 79 **A novel BP neural network for forecasting agriculture water consumption** [8285-220]
L. Yang, L. Zhou, Wuhan Polytechnic Univ. (China)
- 8285 7A **Study on the rail-broken state of centre-fed boundless track circuits** [8285-221]
Y. Zhang, J. Dang, Lanzhou Jiaotong Univ. (China)
- 8285 7B **An improved channel estimation for OFDM transmit systems** [8285-222]
Z. Ji, Wenzhou Vocational and Technical College (China)
- 8285 7C **Cyclic spectrum based carrier recovery for OQPSK** [8285-223]
H. Peng, J. Li, Institute of Information Science and Technology (China)
- 8285 7D **Prominent point InSAR phase filter** [8285-224]
H. Wei, H. Huang, Z. Dong, J. Zhu, National Univ. of Defense Technology (China)
- 8285 7E **Application of wavelets and fractal-based methods for detection of microcalcification in mammograms: a comparative analysis using neural network** [8285-225]
A. S. Noodeh, H. A. Noubari, A. M. Dehnavi, H. Rabbani, Univ. of Tehran (Iran, Islamic Republic of)
- 8285 7F **A modified time-frequency filtering method based on generalized S transform** [8285-226]
C. Zhang, Y. Yang, Harbin Engineering Univ. (China)

- 8285 7G **The application of wavelet analysis in the signal processing** [8285-227]
R. Li, TaiYuan Univ. of Technology (China); B. Cui, North Univ. of China (China)
- 8285 7H **On stereo correspondence estimation: a spiral search algorithm** [8285-228]
M. A. Mannan Mondal, National Univ. of Bangladesh (Bangladesh); M. H. Ali, Univ. of Dhaka (Bangladesh)
- 8285 7I **The study of vehicle detection and identification in intelligent transportation system** [8285-229]
F. Lv, D. Han, Inner Mongolia Univ. of Technology (China)
- 8285 7J **Multi-sensors data fusion algorithm of improved Dempster-Shafer evidence reasoning** [8285-230]
M. Wang, M. Zhu, S. Yu, Central South Univ. of Forestry and Technology (China)
- 8285 7K **Facial classification using artificial neural network techniques** [8285-231]
A. J. Nor'aini, Z. Fatimah, R. Norzilah, Univ. Teknologi MARA (Malaysia)
- 8285 7L **H_∞/H_∞ fault detection observer for linear parameter varying systems** [8285-232]
L. Liu, Beijing Information Science & Technology Univ. (China); X. Wei, Beijing Jiaotong Univ. (China)
- 8285 7M **An improved image fusion approach** [8285-233]
Z. Kou, K. Liu, PLA Univ. of Science and Technology (China)
- 8285 7N **Disparity estimation by reverse fuzzyfication** [8285-234]
M. A. Mannan Mondal, National Univ. of Bangladesh (Bangladesh); M. H. Ali, Univ. of Dhaka (Bangladesh)
- 8285 7O **The application of dummy noise adaptive Kalman filter in underwater navigation** [8285-235]
S. Li, C.-H. Zhang, J. Luan, Navy Academy of Armament (China)
- 8285 7P **Research on synchronization technique of the DRM system** [8285-236]
W. Guo, J. Zheng, W. Cheng, F. Su, Wuhan Univ. (China)
- 8285 7Q **Characterization of Codon usage bias in the newly identified DEV UL18 gene** [8285-237]
X. Chen, Mianyang Normal Univ. (China); A. Cheng, M. Wang, J. Xiang, Sichuan Agricultural Univ. (China)
- 8285 7R **Bioinformatics analysis and characteristics of VP23 encoded by the newly identified UL18 gene of duck enteritis virus** [8285-238]
X. Chen, Mianyang Normal Univ. (China); A. Cheng, M. Wang, J. Xiang, Sichuan Agricultural Univ. (China)
- 8285 7S **Range alignment methods for ISAR imaging** [8285-239]
Z. Su, Y. Yuan, Beihang Univ. (China)
- 8285 7T **Joint signal detection and classification based on cyclostationarity for cognitive radios** [8285-240]
H. Yuan, Z. Jin, Zhengzhou Univ. (China)

8285 7U **Time-domain effects on error rates of multilevel digital pulse interval modulation systems**
[8285-241]

W. Wei, X. Zhang, J. Rao, Naval Univ. of Engineering (China); C. Pan, Element 15 (China)

8285 7V **Fuzzy control of hydraulic servo system based on DSP** [8285-242]

J. He, Hunan Institute of Humanities (China); S.-Y. Yuan, Guilin Univ. of Electronic Technology (China)

Author Index

Conference Committees

Honorary Chair

K.R. Rao, IEEE Fellow; University of Texas at Arlington (United States)

Conference Chairs

Safaa S. Mahmoud, Ain Shams University (Egypt)

Kamaruzaman Jusoff, Universiti Putra Malaysi (Malaysia)

Mohamed Bakr Abdelhalim, AASTMT (Egypt)

Conference Steering Committee

S. R. Bhadra Chaudhuri, Bengal Engineering and Science University (India)

Houssain Kettani, Polytechnic University Puerto Rico (United States)

Nazir Ahmad Zafar, University of Central Punjab (Pakistan)

Madhu S. Nair, Rajagiri College of Social Sciences (India)

Program Committee Chairs

Ved Madan, St. Mary's University College (Canada)

Biju Issac, Swinburne University of Technology (Sarawak Campus) (Malaysia)

Yasser KOTB, Ain Shams University (Egypt)

He Rui, Southwest Jiaotong University (China)

Muhammed Sulleman Memon, Quaide Awam University of Engineering and Technology (Pakistan)

Afaq Ahmad, Sultan Qaboos University (Oman)

International Technical Committee

Ahmed Samak, Menoufia University (Egypt)

Kenny Robert F., University of Central Florida (United States)

Mostafa Mahmoud, Taibah University (Saudi Arabia)

Najla Algadi, Ahmed Ali, Sudan University of Science and Technology (Sudan)

Mullen Laurie, Ball State University (United States)

Jianqiang Sun, South China University of Technology (China)

Rajan John, Karunya University (India)

Capanni Niccolo, The Robert Gordon University (United Kingdom)

Tawiwat Veeraklaew, Chulachomklao Royal Military Academy (CRMA) (Thailand)

Jinglong Wang, Qingdao Technological University (China)

Ahmed Wasif Reza, Faculty of Information Technology, Multimedia University (Malaysia)

Mahanti Prabhat Kumar, University of New Brunswick (Canada)

P. Chaiwanarom, Chulalongkorn University (Thailand)

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)

Wai Phyo Aung, Mandalay Technological University (Myanmar)

Wei Guo, Tianjin University (China)

Bhaba Krishna Mohanty, Indian Institute of Management (India)

Agarwal Ankur, Florida Atlantic University (United States)

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 (United States)

Hussein Moselhy Sayed Ahmed, Cairo University (Egypt)

Sonam Tobgay, Royal University of Bhutan (Bhutan)

P. Kiran Sree, S.R.K. Institute of Technology (India)

Prasad Girijesh, University of Ulster (United Kingdom)

Nasro Min-Allah, COMSATS Institute of Information Technology (Pakistan)

Basim Alhadidi, Al Balqa' Applied University (Jordan)

Taher Omran Ahmed, Aljabal Alghrbi University (Libya)

Pierre André Ménard, Ecole de Technologie Supérieure (Canada)

Pavol Tanuska, Slovak University of Technology (Slovakia)

Jonathan M. Caballero, Philippine Society of IT Educators (PSITE) (Philippines)

S. K. Nagarajan, Annamalai University (India)

Wen-Hsiang Hsieh, National Formosa University (Taiwan)

Hongchan Zheng, Northwestern Polytechnical University (China)

Manzoor Hashmani, Mehran University of Engineering & Technology (Pakistan)

Sharam Jamali, University of Mohaghegh Ardabili (Iran)

Dong-Min Woo, Myongji University (Korea, Republic of)

Chee Seng, Chan, Technology Park Malaysia (Malaysia)

Jiancheng (Kevin) Jia, International Game Technology (United States)

Mohammad Haseeb Zafar, N-W.F.P. University of Engineering & Technology (Pakistan)

Introduction

Dear Distinguished Delegates and Guests,

The Organizing Committee warmly welcomes our distinguished delegates and guests to the International Conference on Graphic and Image Processing (ICGIP 2011) held on 1–2 October 2011, Cairo, Egypt.

The ICGIP 2011 is organized by the International Association of Computer Science and Information Technology (IACSIT) and cosponsored by the Singapore Institute of Electronics (SIE). The ICGIP 2011 is organized to gather members of our international community of 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.

These proceedings record the fully refereed papers presented at the conference. The main conference themes and tracks are Graphic and Image 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 Graphic and Image 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 proceedings 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 exciting 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 are social events at prestigious sites to favor interactions.

We would like to thank the program chairs, organization staff, and the members of the program committees for their work.

We are grateful to all those who have contributed to the success of ICGIP 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 ICGIP 2011 in Cairo, Egypt.

With our warmest regards,

The Organizing Committees
1–2 October 2011
Cairo, Egypt