

2016 International Conference on Multimedia Systems and Signal Processing (ICMSSP 2016)

**New Taipei, Taiwan
3-5 September 2016**



**IEEE Catalog Number: CFP16VAI-POD
ISBN: 978-1-5090-4520-4**

**Copyright © 2016 by the Institute of Electrical and Electronics Engineers, Inc
All Rights Reserved**

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

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

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

IEEE Catalog Number:	CFP16VAI-POD
ISBN (Print-On-Demand):	978-1-5090-4520-4
ISBN (Online):	978-1-5090-4519-8

Additional Copies of This Publication Are Available From:

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

CURRAN ASSOCIATES INC.
proceedings
.com

2016 International Conference on Multimedia Systems and Signal Processing

ICMSSP 2016

Table of Contents

Preface.....	viii
Conference Committee.....	ix
Reviewers.....	xi
Keynotes.....	xii

Signal Analysis and Processing

SSLMS Algorithm Based Impulsive Noise Cancellation from ECG Signal	1
<i>Javeria Habib, Ayesha Zeb, Alina Mirza, and Shahzad A. Sheikh</i>	
Channel Estimation Based on Complete Complementary Sequence and Compressive Sensing for MIMO System	6
<i>S.F. Li, Y.C. Zhang, and Y.F. Zhang</i>	
Objectifying Rehabilitative Tests with Singular Spectrum Analysis	10
<i>Danny M.T. Lee, Tracey K.M. Lee, S. Sanei, K.H. Leo, Y.H. Wong, Z. Ling, and E. Chew</i>	

Image Processing Techniques

Color Image Reconstructions from Bessel-Fourier Moments	16
<i>Bo Pang and Simon Liao</i>	
Adaptive Post Filter for Reducing Block Artifacts in High Efficiency Video Coding	22
<i>Antoine Chauvet, Tomo Miyazaki, Yoshihiro Sugaya, and Shinichiro Omachi</i>	
Interactive Object Extraction from a Video Based on Seed-Line Tracking	26
<i>Takahiro Hayashi and Yusuke Narita</i>	
Enhanced Hemisphere Concept for Color Pixel Classification	31
<i>Van Ng and Terumasa Aoki</i>	
Salient Boundary Detection in the Gradient Spaces	36
<i>Hee Kooi Khoo and Hong Choon Ong</i>	

Computer Applications and Algorithm

Impression Estimation of a Video Based on the Valence-Arousal Model	41
<i>Takahiro Hayashi and Takahiro Yoshida</i>	
Research and Systematic Design on Satellite Integrated Data Management Technology	46
<i>Jian-Bing Zhu and Wei Zhao</i>	
A Bayesian Network Approach to Study Undergraduates' Brand Consciousness	51
<i>Hong Choon Ong, Sze Ern Yau, and Josephine Ying Ying Looi</i>	
An Improved Artificial Bee Colony for Solving Multi-Objective Optimization Problems	56
<i>Sheng-Ta Hsieh and Chun-Ling Lin</i>	
Detection of Machines Anomaly from Log Files in Hard Disk Manufacturing Process	60
<i>Thanatarn Pattarakavin and Prabhas Chongstitvatana</i>	

Control Systems and Engineering

Adaptive Iterative Control for Road Simulation Using the Frequency Domain Filtered-X LMS Algorithm	64
<i>Zhang Yanyan and Yang Zhidong</i>	
Compactification of Low-Cost Servo Valve Using Buckled Tubes and Its Application	69
<i>Shota Harada, Tetsuya Akagi, Shujiro Dohta, Wataru Kobayashi, Keiichiro Koga, and Abdul Nasir Bin Abd</i>	
3D Quasi-Passive Walker of Bipedal Robot with Flat Feet Gait Analysis of 3D Quasi-Passive Walking	74
<i>Shugo Murai, Shinsaku Fujimoto, Akihiro Yamamoto, and Tetsuya Kinugasa</i>	
Development of Flow Rate Control Type Quasi-Servo Valve Using Small-Sized On/Off Valves	80
<i>Masataka Yoneda, Tetsuya Akagi, Shujiro Dohta, Wataru Kobayashi, Yoshinori Moriwake, and Feifei Cho</i>	
Remarks on Hypercomplex-Valued Neural Network-Based Direct Adaptive Controller	85
<i>Kazuhiko Takahashi, Yuka Wakaume, Takahiro Hirayama, and Masafumi Hashimoto</i>	
Improvement of Wearable Power Assist Wear for Low Back Support	90
<i>Shinya Hirotsugu, Feifei Cho, and Toshiro Noritsugu</i>	

Applications in Machinery Manufacturing and Industrial Production

Development of Pressure Intensifier for Water Hydraulic McKibben Muscles	95
<i>Wataru Kobayashi, Shujiro Dohta, Tetsuya Akagi, Kazuhisa Ito, and Shota Harada</i>	
Development of the Manipulator for Special Environment	100
<i>Feifei Cho, Tetsuya Akagi, Shujiro Dohta, and Yasuko Matsui</i>	
Research on Three-Dimensional Reproduction Technology of Coal Face	105
<i>Yong Shi, Yize Sun, Qianwen Zhong, and Helei Zhu</i>	
An Economic Manufacturing Quantity Model for Deteriorating Items with Condition-Based Maintenance	110
<i>Guoqing Cheng, Binghai Zhou, and Faqun Qi</i>	
Just-in-Time Material Replenishment Scheduling in a Mixed-Model Assembly Line	115
<i>Binghai Zhou and Tao Peng</i>	
Author Index	119