

Constantinides International Workshop on Signal Processing (CIWSP 2013)

IET Seminar Digests 2013/001

**London, United Kingdom
25 January 2013**

ISBN: 978-1-62748-594-4

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 Institution of Engineering and Technology
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the Institution of Engineering and Technology
at the address below.

Institution of Engineering and Technology
P. O. Box 96
Stevenage, Hertfordshire
U.K. SG1 2SD

Phone: 01-441-438-767-328-328
Fax: 01-441-438-767-328-375

www.theiet.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

Cascade of Perfect Reconstruction Analysis and Synthesis Filter Banks: the New Architecture of Next Generation Wideband Receivers	1
<i>F. Harris; Xiaofei Chen; E. Venosa</i>	
A Fast Resampling Scheme for Particle Filters	9
<i>Tiancheng Li; T. P. Sattar; Dedong Tang</i>	
Discrete Goull Transform - Fast Realisations and Data Hiding	13
<i>A. N. Skodras</i>	
H.264 Region-based Weighted Prediction for Scenes with Local Brightness Variations	17
<i>Sik-Ho Tsang; Tsz-Kwan Lee; Yui-Lam Chan; Wan-Chi Siu</i>	
Splicing Partial Body Motion Video Sequences for Motion Synthesis	21
<i>W. W. L. Ng; D. P. K. Lun</i>	
Hybrid Binarisation Technique for the Bi-CoPaM Method	25
<i>B. Abu-Jamous; Rui Fa; D. J. Roberts; A. K. Nandi</i>	
Joint User Scheduling, Link Adaptation and Space Division Multiplexing for the Uplink of Multi-cell Distributed Antenna Systems with Imperfect CSI	29
<i>R. Samano-Robles</i>	
Packet Loss Concealment by Interpolation for Speech Over IP Network Services	33
<i>F. Merazka</i>	
Empirical Mode Decomposition VAD Based on Multiple Sensor LRT	37
<i>T. Petsatodis; F. Talantzis; C. Boukis</i>	
Efficient MFCC Feature Extraction on Graphics Processing Units	41
<i>Haofeng Kou; Weijia Shang; I. Lane; J. Chong</i>	
Outage Analysis of Multi-relay Selection in Underlay Cognitive AF Relay Networks	45
<i>G. J. Chen; L. Ge; Y. Gong; J. A. Chambers</i>	
Subband-based Joint Blind Source Separation for Convolutional Mixtures Employing M-CCA	49
<i>Bo Peng; Wei Liu; D. P. Mandic</i>	
Massively Parallel Time-stretched Analog-to-digital Converter	53
<i>Saihua Xu; Yong Ching Lim; Jia Haur Wong; Quoc Huy Lam</i>	
Contextual Constraints Based Kernel Discriminant Analysis for Face Recognition	57
<i>Xian Wu; Xiao-Qi Sun; Xiao-Jun Wu; Zhen-Hua Feng</i>	
Universal Approach for Estimating Unknown Frequencies for Unknown Number of Sinusoids in a Signal	61
<i>A. Ahmed; Y. F. Hu; P. Pillai</i>	
Content Based Image Retrieval by Combining Color, Texture and Centrist	65
<i>Guan-Lin Shen; Xiao-Jun Wu</i>	
Visual Analysis for Semantic Search in Digital Libraries	69
<i>I. Kollia; Y. Kalantidis; K. Rapantzikos; S. Kollias</i>	
Direction-of-arrival Estimation in Partially Calibrated Subarray-based MIMO Radar	73
<i>Wei Zhang; Wei Liu; Siliang Wu; Ju Wang</i>	
Portable Multi Touch Tabletop: A Composite Approach for Industrial Applications	77
<i>R. Herrera-Acuña; V. Argyriou; S. A. Velastin</i>	
Ultrasound Video Despeckle Filtering for High Efficiency Video Coding in M-Health Systems	81
<i>A. Panayides; C. P. Loizou; M. S. Pattichis; E. Kyriacou; C. N. Shizas; A. N. Nicolaidis; C. S. Pattichis</i>	
Estimation for Amplify-and-Forward Transmissions with Nonlinear Amplifiers	85
<i>R. Santucci; M. K. Banavar; A. Spanias; C. Tepedelenlioglu</i>	
Intelligent Digital Filters with Application to Salt and Pepper Noise Reduction in MR Brain Images	89
<i>Hon Keung Kwan</i>	
Author Index	