2015 International Conference on Computer and Computational Sciences (ICCCS 2015)

Greater Noida, India 27-29 January 2015



IEEE Catalog Number: ISBN:

CFP1567Y-POD 978-1-4799-1820-1

Copyright © 2015 by the Institute of Electrical and Electronic 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 publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.

IEEE Catalog Number: CFP1567Y-POD ISBN (Print-On-Demand): 978-1-4799-1820-1

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



Contents

Pref		i ii
	Advisory Board	
	nnical Program Committee	iii
Orga	anizing Committee	vii
	Session – I Hardware and Software Design	
1.	Hardware Implementation of OFDM Transceiver using FPGA E. Hari Krishna, K. Sivani, K. Ashoka Reddy	3
2.	OIV-CMOS: A Novel Approach towards Leakage Power Reduction Nidhi Gaur, Smita Singhal, Pradeep Kumar, Anu Mehra	8
3.	Dual Band π-Shaped Slotted Patch Antenna for Wireless Applications Ajay Kumar Sharma, B.V.R Reddy, Ashok Mittal	12
4.	Fan Blade Shaped Slotted Patch Antenna for Wideband Circular Polarization Ajay Kumar Sharma, B.V.R Reddy, Ashok Mittal	15
5.	An Approach to Implement VSS-LMS Algorithm in Frequency Domain for Adaptive Noise Cancellation Rachana Nagal, Pradeep Kumar, Poonam Bansal	18
6.	Implementation of an ALU Using Modified Carry Select Adder for Low Power and Area-Efficient Applications Priyanka Nautiyal, Pitchaiah Madduri, Sonam Negi	22
7.	User-Friendly MATLAB Based Graphical User Interface for Performance Analysis of Control System Sahaj Saxena, Palak Anmol, Yogesh V. Hote	26
8.	Power System State Estimation Using Gravitational Search Algorithm B. Vedik, Ashwani Kumar Chandel	32
9.	Spatial Data Mining: Recent Trends and Techniques Arvind Kumar, Aanchal Kakkar, Rana Majumdar, Anurag Singh Baghel	39
10.	Research on the Value of Crowbar Resistance to Low Voltage Ride through of DFIG Bin Liu, Changbao Xu, Junguo Gui, Chenghui Lin, Mengqiao Shao	44
11.	Remedy for Open-circuit Fault of 4-Phase Permanent Magnet Fault Tolerant Motor Si Binqiang, Zhu Jihong	49
12.	A Wide Pulse Response Procedure for Tuning of PD/PID Controller for Integrating Processes Goran S. Kvascev, Zeljko M. Djurovic, Vladimir D.Vlatkovic	54
13.	An Ellipsometric Microscope Based Real-time Observation of Head Slider in Hard Disk Drives Qingqing Liu, Fei Yan	N /A
14.	The Analysis of Axle Box Vibration Signal Based on Frequency Slice Wavelet Transform Fuge Wang, Zongyi Xing, Yong Qin, Jianwei Li, Yuejian Chen	64

15.	Dependence Analysis of Monitoring Data for Local Fans Optimizing Works and the Coal Mine Safe Production Cao Qing-Jiao, Wang Jing-Shuang, Wang Wei	N /A
	SESSION – II	
	COMPUTER GRAPHICS, ADVANCED SOFTWARE ENGINEERING & OTHERS	
16.	Lens Distortion Correction Method Based on Linear Approximation Min Qi, Hongjuan Xin, Ke Li, Yangyu Fan, Yong Dong, Zhichao Wu	75
17.	One Adaptive Control Method used in Quartz Lamp Radiation Aerodynamic Heating Simulation Experiment WANG Decheng, WANG Lei, WANG Haidong, LIGuohao	N /A
18.	An Agent-based Real Time Scheduling System for Mix-flow Manufacturing Yanting Ni	83
19.	Analysis on Driving Factors for Water Security of Chaohu Watershed Based on Set Pair Exponential Potential Zhengwei Pan, Yanhua Wang, Yueying Luo, Kun Ding	N /A
20.	Experimental Evaluation of High Performance Road base Stabilized with Carboxylated Styrene–Butadiene Emulsion and Portland Cement Mojtaba Shojaei Baghini, Amiruddin Ismail	N /A
21.	The Application of Matching Pursuit to Extract Vibration SignalFeature Lingli Cui Chunqing Ma Na Wu	100
22.	A Level-wise Search Approach to Frequent Web Access Pattern Discovery with Hybrid Reasoning Ming Sun, WenJieKang, Bo Chen	105
23.	A Study and Implementation of VGA Multi-Resolution on Android Platform Zhihua Xie, Ning Li, Lie Luo	110
24.	Higher Order Variational Multiplicative Noise Removal Model Mushtaq Ahmad Khan, Wen Chen, Asmat Ullah	116
25.	Object-oriented Technology Research of High Resolution Remote Sensing Image Classification Yang Zhou, Guoqing Yao, Meng Li	119
26.	Systems Economy from Industrial Engineering: A Methodology of System Design and Improvement Cheng Chen, Kaihu Hou, Xuying Zhu, Fei Zhang	N/A
27.	A Kind of Adaptive Research on Flight Parameters Selection Liu Fei, Yin Zhiping, Huang Qiqing, Zhang Xiayang, Ma Kaichao	130
28.	Adaptive Classification of Big Data Flight Sample Liu Fei, Yin Zhiping, Huang Qiqing, Zhang Xiayang, Liu Jiapeng	136
29.	Modelling and Optimization of a Supply Chain Scheduling Problem Zhaoxia Guo, Can Yang, Longchao Chen, Jing Yang	142
30.	Fatigue Detection based on Isophote Curve Zhenghong Deng, Ruijun Jing, Litao Jiao, Liyan Liu	146

SESSION – III

ADBMS, COMPUTER COMMUNICATION AND SECURITY

31.	A Secure and Reliable Video Watermarking Technique Pragya Agarwal, Arvind Kumar, Ankur Choudhary	151
32.	Social, Technical and Economical Challenges of 5G Technology in Indian prospective: Still 4G Auction not over, but time to think about 5G in India Manoj Kumar Pandey, Amit Gaurav, Vivek Kumar	157
33.	ZigBee Technology: Current Status and Future Scope Manpreet, Jyoteesh Malhotra	163
34.	Modified DEEC: A Varying Power Level Based Clustering Technique for WSNs Twinkle Tiwari, Nihar Ranjan Roy	170
35.	Fault Tolerance Based Routing Approach for WMN Meenu Chawla, Ankit Mundra	177
36.	Location Based Coordinator Election Algorithm in Distributed Environment Sheenu Chhabra, Gajendra Tyagi, Ankit Mundra, Nitin Rakesh	183
37.	An Improved Cluster Protocol Design Method for Low Energy Uneven Wireless Sensor Network Dai Min, Xie Chun	189
38.	Study on Farmland Irrigation Remote Monitoring System Based on ZigBee Wang Shuwen, Zhang Changli	193
39.	A Study on theConstruction and Management of Cloud-based Patients Accessible Hospital Information Systems Runling Wang, Dongxiao Gu, Fangjin Tao	198
40.	Identification of the Factors that Affect the User Reaction to Posts on Facebook Brand Pages Hyesun Jeon, Hyung Jun Ahn	203
41.	Multi-functional Parcel Delivery Locker System SUN Ze-hong, Zhao Guang-yuan	207
42.	A new DWT-based Lossless Chaotic Encryption Scheme for Color Images Xiangjun Wu, Zefan Wang	211
43.	The Washing System Based on RFID Research Zhang Yajuan, Wei Jun, Ren Hongwei, Hu Yan, Zhang Yong	217
44.	Real Time Navigation Algorithm Based on Every Vehicles Being Online Zeng Qiang, Li Ning, Zeng Ang	221
	Session – IV Evolutionary Computing, Computer Vision and Image Analysis	
45.	RGB Image Steganography on Multiple Frame Video using LSB Technique Saket Kumar, Ajay Kumar Yadav, Ashutosh Gupta, Pradeep Kumar	220
46.	Identification of Different Stages of Diabetic Retinopathy Surbhi Sangwan, Vishal Sharma, Misha Kakkar	232
47.	Extraction of High Confidence Minutiae Points from Fingerprint Images Kamlesh Tiwari, Gunakesh Tiwari, Phalguni Gupta	238

48.	RNA Pseudoknot: Topology and Prediction Dolly Sharma, Shailendra Singh, Trilok Chand	244
49.	3D Terrain Recovery from a Single Image Based on MinimizationAlgorithm MinQi, Meng Li, Yuelei Xu, Bofei Zhu	249
50.	Restoration Algorithm of Damaged mark Image Based on Texture Synthesis Min Qi, Zhichao Wu, Yuelei Xu, Hongjuan Xin, Yong Dong	253
51.	IOT- Based Air Pollution Monitoring and Forecasting System Chen Xiaojun, Liu Xianpeng, Xu Peng	257
52.	An Investigation on Gridding Technique for Radio Astronomical Image Reconstruction Hongli Luo, Hui Deng, Feng Wang, Wei Dai, Shoulin Wei, Bo Liang, Hui Deng	261
53.	Comprehensive Measurement System for Screw Thread Parameter Based on Machine Vision Jing Min	266
54.	Comparative Analysis of Different Fusion Rules for SAR and Multi-spectral Image Fusion Based on NSCT and IHS Transform Xu JiaHu Chong, Cheng Xuejiao	27 1
55.	An Image Sorting Algorithm Based on SIFT Feature Matching Zhou Ying, Zhang Jun	275
56.	Digitizing Construction Method of Large Knowledge Base System Zhu Ping, Tan Yuanhua	279
57.	Identifying the Quality Evaluation Indicator of CRM using an Extended DEMATEL Method Ya Qun Li, Wan Chun Duan	284
58.	Integration of Humain Intelligence in Transformation Process of the Pedagogical Scenario: Approach Based on the Crowdsourcing Dalila KOULOUGLI, Zhor BOUZIDI	288
59.	Adaptive Support Weight Aggregation in Segmentations for Stereo Matching Jingzhou Huang, Changyu Diao	292
Auth	ors Index	297