

2012 International Conference on Radar, Communication and Computing

(ICRCC 2012)

**Tiruvannamalai, India
21 – 22 December 2012**



**IEEE Catalog Number: CFP1265T-PRT
ISBN: 978-1-4673-2756-5**

Contents

<i>Preface</i>	iii
<i>Committee</i>	v

WIRELESS COMMUNICATION

BER Performance Improvement for Secure Wireless Communication Systems based on CSK- STBC Techniques	1
<i>Lwaa Faisal Abdulameer, D. Jokhakar Jignesh, U. Sripati and Murlidhar Kulkarni</i>	
Securing VoIP Networks via Signaling Protocol Layer	6
<i>Kapila Moon, M.M. Moon and B.B. Meshram</i>	
Huddle Based Tenable Data Communication in Wireless Mesh Networks	11
<i>R. Regan, J.Martin Leo Manickam and R. Anand</i>	
Design and Development of a Health Monitoring Systems Based on Mobile Node	14
<i>R. Balaganesh and G. Velmathi</i>	
Energy-Efficient Position Based Routing Protocol for Mobile Ad Hoc Networks	18
<i>Supriya Srivastava, A.K. Daniel, R. Singh and J.P. Saini</i>	
Multi-Sensor Data Fusion in Cognitive Radio from its Perspective	24
<i>Nishant Sinha, Nabajit Deka, Sourav Dhar, R. Bera and Debdatta Kandar</i>	
A Double Layered Additive Space Sequenced Audio Steganography Technique for Mobile Network	29
<i>Saswati Ghosh, Debashis De and Debdatta Kandar</i>	
Introduction to Packet Combining in Cooperative Relay Network using Soft Bit Maximal Ratio Combining Technique	34
<i>Dhiraj K. Thote, Prabhakar D. Dorge, Sanjay S. Dorle and Harsha R.Tembhekar</i>	
Contemporary and Efficient Shared Area Network in Peer-To-Peer Communication	38
<i>S. Suthir and S. Janakiraman</i>	
Nanocommunication using QCA: A Data Path Selector cum Router for Efficient Channel Utilization	43
<i>Soumyadip Das and Debashis De</i>	

WIRELESS SENSOR NETWORKS

User Centric Framework of Power Schemes for Minimizing Energy Consumption by Computer Systems	48
<i>P.K. Gupta and G. Singh</i>	
Agriculture Change Detection Model using Remote Sensing Images and GIS: Study Area Vellore	54
<i>Suresh Kumar, Margaret Anuncia, Sebastian Johnson, Ankit Agarwal and Prashant Dwivedi</i>	
Land use Identification Model by using Remote Sensing Images	58
<i>Suresh Kumar, Margaret Anuncia, Shubham Shah, Gaurav Tripathi and Advait Varadarajan</i>	
An Analysis on Data Aggregation in Wireless Sensor Networks	62
<i>P.N.Renjith and E. Baburaj</i>	
Congestion Adaptive Multipath Routing Protocol for Multi- Radio Wireless Mesh Networks	72
<i>D.G. Narayan, R. Nivedita, S. Kiran and M. Uma</i>	

Analysing Cross Layer Performance Based on Sinking and Collision Behaviour Attack in MANET	77
<i>S. Hemalatha, P.C. Senthil Mahesh, Paul Rodrigues and M. Raveendiran</i>	
Environmental Monitoring using Sensor Data Fusion	83
<i>Siddharth Sankar Das, Nabajit Deka, Nishant Sinha, Sourav Dhar, Dipanjan Bhattacharjee and Shantanu Gupta</i>	
Balanced Trust Management for Ad Hoc Networks	87
<i>S. Feslin Anish Mon, Raj Kumar Saha and L. Rajaji</i>	
Design of an FPGA Based Intelligence Traffic Light Controller with VHDL	92
<i>Sourav Nath, Chandrajit Pal, Suman Sau, Sreyanka Mukherjee, Abhishek Roy, Arghya Guchhait and Debdatta Kandar</i>	
Virtual Visualization of Distributed Network Traffic using Fractals	98
<i>S. Sharmi and Munesh Singh Chauhan</i>	

RADAR SIGNAL PROCESSING AND OPERATION

MIMO Radar Ambiguity Analysis of Phase Coded Pulse Waveforms	101
<i>G.V.K. Sharma and K. Raja Rajeswari</i>	
Analysis of Stepped Frequency Pulse Train	107
<i>Venu B. Inala and G. Manmadharao</i>	
Design of 8x8 Circularly Polarized Planar Array Antenna for ISM Band	112
<i>D.L. Lavanya</i>	
Firefly Algorithm with Fireflies having Quantum Behavior	117
<i>A. Manju and M.J. Nigam</i>	
Comparative Performance Analysis of MUSIC and ESPRIT on ULA	120
<i>M.P. Priyadarshini and R. Vinutha</i>	

SOFT COMPUTING AND ARTIFICIAL INTELLIGENCE

Quality Measure Model of Music Rhythm using Genetic Algorithm	125
<i>Sudipta Chakrabarty and Debashis De</i>	
Improved T-Cluster Based Scheme for Combination Gene Scale Expression Data	131
<i>K. Vengatesan and S. Selvarajan</i>	
HeurisFCP - A Heuristic Approach to Identify Frequent Contiguous Patterns (FCP) in Sequence Database	137
<i>S.Rajasekaran and L. Arockiam</i>	
Non Homogeneous Clutter Mitigation using STAP	143
<i>Ashwini Saket, Prince K. Dubey, Nandan Mishra, Sourav Dhar and Debdatta Kandar</i>	
Low Angle Land Clutter Mitigation - A Soft Computing Approach	148
<i>Nikita Garg, Nupur, Sourav Dhar and Debdatta Kandar</i>	
Semantic Web Technology in the Complexity Level Based Recruiter's Assistant/ Training Library Tool	153
<i>K.K. Kaviarasan</i>	
On Constructing Regular Expressions of Web Page Traversals for Efficient Filtering	156
<i>A. Kumaravel and R. Pradeepa</i>	
Constructing an Automaton for Exploring Dynamic Labyrinths	161
<i>A.Kumaravel and K.Rangarajan</i>	
A Survey on Host-Based Botnet Identification	166
<i>E. Ilavarasan and K. Muthumanickam</i>	

CLLOUD COMPUTING TECHNIQUES

A Semantic-Based Access Control for Ensuring Data Security in Cloud Computing <i>M. Auxilia and K. Raja</i>	171
Cloud Computing: A Solution to Human Resource Management System <i>Ashis Datta, Md. Ruhul Islam, Amit Kumar Mukherjee and Debdatta Kandar</i>	176
A Cloud-Based Intrusion Detection System for Android Smartphones <i>Rohit S. Khune and J. Thangakumar</i>	180

IMAGE PROCESSING

Digital Image Authentication System Based on Digital Watermarking <i>Neeraj Bhargava, M.M. Sharma, Abhimanyu Singh Garhwal and Manish Mathuria</i>	185
An Approach for Identification and Implementation of Design Patterns in Online Banking <i>A. Meiappane, V. Prasanna Venkatesan, A. Vikneshraj, N. Adithya Prasanna and V. Vittal Devanathan</i>	190
Inheritance in Indian Classical Music: An Object-Oriented Analysis and Pattern Recognition Approach <i>Debashis De and Samarjit Roy</i>	193
Image Searching Based on Image Mean Distance Method <i>R. Venkata Ramana Chary, D. Rajya Lakshmi and K.V.N. Sunitha</i>	199
Identification and Implementation of Observer and State Pattern in Internet Banking Application <i>A. Meiappane, B. Chithra and V. Prasanna Venkatesan</i>	202
Improvement of QoS in VANET with Different Mobility Patterns <i>Prabhakar D. Dorge, Sanjay S. Dorle, Megha B. Chakole and Dhiraj K. Thote</i>	206
FPGA Implementation of High Speed Multiplier using Higher Order Compressors <i>R. Marimuthu, S. Balamurugan, Bala Krishna Tirumala and P.S. Mallick</i>	210
A Survey on Semantic Similarity between Words in Semantic Web <i>P. Ilakiya, M. Sumathi and S. Karthik</i>	213
Automatic Visual Inspection of PCB using CAD Information <i>A. Anu, Margret Anuncia and L. Rajaji</i>	217

DATA MINING AND CRYPTOGRAPHY

Parallel K-Nearest Neighbor Implementation on Multicore Processors <i>P.P. Halkarnikar, Ananda P. Chougale, H.P. Khandagale and P.P. Kulkarni</i>	221
Quantum Dot-Cellular Automata Based Cipher Text Design for Nano-Communication <i>Jadav Chandra Das and Debashis De</i>	224
Comparative Analysis of Attribute Selection Measures Used for Attribute Selection in Decision Tree Induction <i>Advait S. Bhatt</i>	230
A Methodology for E-Content Preparation using Semantic Similarity between Words <i>U. Nanda Gopal</i>	235
Malicious Code Prevention in Kernel Mode <i>G. Saranya and G. Balamurugan</i>	239
Optimized Summarization of Research Papers as an Aid for Research Scholars using Data Mining Techniques <i>Sunita R. Patil and Sunita M. Mahajan</i>	243

FPGA Based Data Acquisition and Data Monitoring System <i>R. Adhikary, M. Chakraborty, B. Dara, A. Bharti and S. Mukherjee</i>	250
Security Issues in Virtualization Environment <i>R. Anand, S. Sarswathi and R. Regan</i>	254
Algorithm for Detecting Dynamic Webpage and its Importance <i>Ashish Kumar Sultania</i>	257
Reconciling Visual Cryptography with an Etched Photoengraving Practice for an Exceedingly Secured Secret Image Sharing <i>N. Siva Selvan</i>	260
Detecting and Temporarily Recovering Lost Packets in Ad-Hoc Network by using Bypass Routing <i>P. Ashok, N. Purushothaman and K. Elumalai</i>	264
Design of Fractional Order Differentiators using Novel s to z Transform <i>B.T. Krishna</i>	268
Comparison of the Classifiers in Bangla Handwritten Numeral Recognition <i>Chayan Halder, Jaya Paul and Kaushik Roy</i>	272
Minimization of Congestion in Content Provider on Access Network <i>D. Sivakumar and S. Mohanarangan</i>	277
A Systemic Resource Allocation for Multi-User Video Transmission over Wireless Network <i>S. Gnanavel, S. Ramakrishan and N. Mohan Kumar</i>	282

CHANNEL MODELLING AND VEHICULAR COMMUNICATION

Implementation of PAPR Reduction Method in OFDM with Clipping & Amplification <i>Asma S. Inamdar and A.P. Laturkar</i>	289
Vehicle Object Observation using Position Based Local Gradient Model <i>R.C. Karpagalakshmi and D. Tensing</i>	293
Object Separation in Shadow Clutter in Video Sequences <i>P.P. Halkarnikar, S.N. Talbar and P.N. Vasambekar</i>	299
Multilevel Authentication for Vehicular Ad-Hoc Networks with Cryptography Hash Functions <i>M. Malathi, P.S. Divya, M. Anusha and K. Rajalakshmi</i>	303
Enhanced Automated Crash Reporting System in Vehicles Based on SMS & MMS with Fish Eye CAM Camera <i>R. Manoharan, G. Balamurugan and B. Rajmohan</i>	307
Dispersion Managed Solitons Transmission in 54,000 m Optical Link <i>Kadam Bhambri and Neena Gupta</i>	312
Design of Printed Rectangular Monopole Antennas for UWB Applications <i>V.N.Lakshman Kumar, M. Satyanarayana, B. Pavan, K. Vinodh Kumar and A. Vamsi Krishna</i>	315

ENVIRONMENTAL SCIENCE

Destination-Sequenced Distance Vector Routing (DSDV) using Clustering Approach in Mobile Adhoc Network <i>S. Nithya, G. Arul Kumar and P. Adhavan</i>	319
A Foliage Scatter Model to Determine Topology of Wireless Sensor Network <i>B.S. Paul and S. Rimer</i>	324
AUTHOR INDEX	329