

2014 International Conference on Advances in Electronics, Computers and Communications (ICAECC 2014)

**Bangalore, India
10-11 October 2014**



**IEEE Catalog Number: CFP1455W-POD
ISBN: 978-1-4799-5497-1**

Table of Contents

Friday, 10-Oct-2014

Soft Computing and Applications

Paper ID	Title of the Paper	Authors Name	Page
63	Decision Fusion Using Type 1 Fuzzy Logic for Situation Assessment in Aviation Scenarios	Aditi Prabhu Harsha Manivannan Karthik Sridhar Shakeel Ahmed Lakshmi Shrinivasan	
64	Soft Calibration Technique with SVM for Intelligent Temperature Measurement using Thermocouple	Santhosh K. V. B. K. Roy	
272	PSO with Dynamic Acceleration Coefficient based on Multiple Constraint Satisfaction Implementing Fuzzy Inference System	Chayan Banerjee Ruchi Sawal	
311	Selected Indian Stock Predictions using a Hybrid ARIMA-GARCH Model	C. Narendra Babu B. Eswara Reddy	

Computing-1

Paper ID	Title of the Paper	Authors Name	Page
65	A Survey on Various Component Repositories with Detail Study of Different Methods of Storage and Extraction of components	Inderjit Singh Ashima Singh	
338	Service Framework for Dynamic Multilingual CAPTCHA Challenges:IN-CAPTCHA	M. Tariq Banday Shafiya Afzal Sheikh	
395	An Approach to Rank Code Clones for Efficient Clone Management	Ridhi Garg Rajkumar Tekchandani	
410	Novel Methodology for Requirements to Design Traceability of Onboard Software of Features of Tumor	Renuka Agarwal Rajiv R. Chetwani M. Ravindra Bharadwaj K. M.	

Digital Signal Processing

231	Real Time Analysis of EEG Signals on Android Application	Prabhakara M. Vaishali Kulkarni	
302	A Novel Architecture for CIC Decimation Filter	Sachin B. R. Ullas B. S.	
312	Simulation And Design of a Chipless Passive RFID Tag	M. Sree Sabarish S. Srihari Swathi Arunaa T. S. Dhanesh G. Kurup	
319	Speech Emotion Recognition	S. Lalitha Abhishek Madhavan Bharath Bhushan, Srinivas Saketh	
484	Extraction of Feature Vectors for Analysis of Musical Instruments	Mangal Joshi Sharmila Nadgir	

Data Engineering

Paper ID	Title of the Paper	Authors Name	Page
103	Comparing OPENSTACK and VMWARE Analysis	Shalmali Suhas Sahasrabudhe Shilpa S. Sonawani	
344	Distributed In-memory Cluster Computing Approach in Scala for Solving Graph Data Applications	Johnpaul C. I. Neetha Susan Thampi	

Paper ID	Title of the Paper	Authors Name	Page
365	Signature based Malware Detection for Unstructured Data in Hadoop	Abhaya Kumar Sahoo Kshira Sagar Sahoo Mayank Tiwary	
429	Detection of Guilty Agents by Maintaining the Confidentiality of the Data on the Web	Nilangi Mane Ms. D. B. Gothawal	
499	FT2R2Cloud: Fault Tolerance Using Time-Out and Retransmission of Requests for Cloud Applications	Mylara Reddy C. Nalini N.	
Robotics			
Paper ID	Title of the Paper	Authors Name	Page
22	Surrogate-Robot	Saurabh Nair Dhruven Shah Chinmay Gadgil	
149	RGB-D Sensor based Human Detection and Tracking using an Armed Robotic System	Hashim Masod Kahily A. P. Sudheer M. D. Narayanan	
403	Real Time Acoustic Source localization of Emergency Signals	Geetanjali Mandewalkar Subhash S. Kulkarni Veena S. Lokesha H.	
476	Android Based Wireless Gesture Controlled Robot	Altaf Ganihar Shreyas Joshi Rahul G. Rohini Hongal Uma Mudenagudi	
208	Sign Language Interpreter Using a Smart Glove	Nikhita Praveen Naveen Karanth Megha M. S.	
Digital Image Processing and Applications-1			
Paper ID	Title of the Paper	Authors Name	Page
82	Automated Detection Of Diabetic Retinopathy Through Image Feature Extraction	Akshatha Rao M. Rekha Bhandarkar T. C. Manjunath	
144	Detection and Classification of Ground penetrating Radar Image using Textural Features	Nagashree R. N. Aswini N. Dyana A. C. H. Srinivas Rao	
212	Image Encryption and Decryption using Chaotic Key Sequence generated by Sequence of Logistic Map and Sequence of States of Linear Feedback Shift-register	Rohith S. K. N. Hari Bhat A. Nandini Sharma	
213	A Secure and Robust Digital Image Watermarking Scheme using Repetition Codes for Copyright Protection	Rohith S. K. N. Hari Bhat B. K. Sujatha	
237	Fast Oil Paint Image Filter Algorithm: Optimization at Overlapped Sub-Pixel	Siddhartha Mukherjee Haresh S. Chudgar	
448	Speeding-up SIFT based Copy Move Forgery Detection Using Level Set Approach	Sudhakar K. Sandeep V. M. Subhash Kulkarni	

Wireless Systems			
Paper ID	Title of the Paper	Authors Name	Page
110	Multipurpose Android Based Mobile Notifier	Saurabh Malgaonkar Vivek Maurya Mukul Kulkarni Gurtej Singh Majithia	
267	Impact of Retransmission Policies on Performance of Concurrent Multipath Transfers in Wireless Heterogeneous Networks	Shubhangi Kharche Sanjay Pawar Shikha Nema	
431	A Novel Ultra Wide Band Radar Absorber with Reduced Thickness for Circular Polarization Transfers in Wireless Heterogeneous Networks	Chandrika Sudhendra Madhu A. R. Aswathy Sasidharan T. S. Rukmini KARK Rao	
459	Design of EMI Hardened Computer for FC Communication System	Adesh Panwar Amit Kumar	
216	A Channel Coder Design for a Novel High Speed Communication System	Nivia George Neshma A. N. Nanditha K. Jain Francis, Jerin Joseph Sarika K. T. Abin Johns Raju	
Electronic System Design			
Paper ID	Title of the Paper	Authors Name	Page
308	On the performance comparison of compressed sensing based detectors for sparse signals Compressive detectors for sparse signals	Anupama R. Siddeshwar M. Jattimath Shruthi B. M. Pallaviram Sure	
345	On the Design of Hazard free Reversible Asynchronous Circuits	Nagamani A. N. Vinod Kumar Agrawal Shruti J. Bhat Vandana J. Vidya V.	
360	A System and Method for Transmission of Traffic Sign Board Information to Vehicles and Relevance Determination	Praveen Kumar Volam Ajith R. Kamath Shivakumar S. Bagi	
435	Comparative analysis of various Domino logic circuits for better performance	Ravikant Thakur Ajay Kumar Dadoria Tarun Kumar Gupta	
447	A Low Phase Noise 10-G bits/s Clock and Data Recovery Circuit with Modified D Latch For Backplane Applications Using Dual Loop Architecture	D. Pavan Kumar Sharma Patri Sreehari Rao KSR Krishna Prasad	

Saturday, 11-Oct-2014			
Ad Hoc Networks and Security			
Paper ID	Title of the Paper	Authors Name	Page
157	Prolonging the MANET Lifetime through Wireless Energy Transfer using High Powered and Native Powered Mobile Nodes	K. Muralidhar N. Prathibha Bharathi	
184	Secured Data Integrity Routing for Wireless Sensor Networks	Ranjani Shashikala Kavitha C.	
437	Cluster based Data Aggregation in Wireless Sensor based Network for Public Utility Control and Management	Raja Jitendra Nayaka C. Rajashekhar C. Biradar	
494	Auto Defense Mechanism for Sybil Attacks in MANETS using QABR Protocol	Anitha V. Akilandeswari J. Sowmya P.	
497	Implementation of Security Mechanism in Wireless Sensor Network Using Crossbow Motes	Nayana Hegde Sunilkumar S. Manvi	
392	Resource Prediction using Wavelet Neural Network in Mobile Ad-hoc Networks	Shilpa Shashikant Chaudhari Rajashekhar C. Biradar	
Digital Image Processing and Applications-2			
Paper ID	Title of the Paper	Authors Name	Page
240	Fragility Evaluation of Intermediate Significant Bit Embedding (ISBE) based Digital Image Watermarking Scheme for Content Authentication	Shabir A. Parah Javaid A. Sheikh G. M. Bhat	
317	Hough Transform and Cepstrum Based Estimation of Spatial-invariant and Variant Motion Blur Parameters	Mayana J. Shah Upena D. Dalal	
329	Prediction of diseases by Cascading Clustering and Classification	B. V. Sumana T. Santhanam	
379	Brain Tumor Segmentation using Thresholding and Morphological Operations and Extraction of Features of Tumor	Deepthi Murthy T. S. G. Sadashivappa	
466	Comparison of Classification Results obtained by using Cyclostationary Features, MFCC, proposed Algorithm and Development of Environmental Sounds Classification System	Phani Teja Marupaka Rohit Kumar Singh	
442	Effect of Global Feature in Grid Based Framework for Retrieving Near Duplicate Images	B. Sirisha Ch. NagaMallika B. Sandhya	
Electronic System Design			
Paper ID	Title of the Paper	Authors Name	Page
59	Automobile Black Box System for Accident Analysis	Monisha J. Prasad Arundathi S Nayana Anil Harshikha Kariyappa B. S.	
72	Glitch Elimination and Optimization of Dynamic Power Dissipation in Combinational Circuits	Karthik H. S. B. Mohan Kumar Naik	

Paper ID	Title of the Paper	Authors Name	Page
74	Chaotic Spread Spectrum Modulation-A Hardware Implementation Approach	Katyayani Kashyap Manash Pratim Sarma Kandarpa Kumar Sarma	
96	Hardware Implementation and Testing of Effective DPCM Image Compression Technique using Multiple-LUT	Binu Alias Anu Mehra Harsha P.	
125	Design of Low Power,Low Noise Miniaturized Electronics for Methane Sensors for Mars	Jayesh Jayarajan Rajiv Kumaran V.D. Patel Sanjeev Mehta Sandip Paul A. R. Chowdhury	
493	Implementation of ECG Sensor for Real Time Signal Processing Applications	Dhanashri H. Gawali Vijay M. Wadhai	
Embedded Systems			
Paper ID	Title of the Paper	Authors Name	Page
205	Design of a Power Efficient SPI Interface	Dwaraka N. Oruganti Siva S. Yellampalli	
305	The FPGA Based Emulation of Complex SoC for ADAS Market on ZeBu-Server	Vinay B. K. Manjula Harihar Abdulraheem Killedar	
335	Multi-coded EX-OR Masking Technique to Reduce Message Length Variation for CAN Based Distributed Embedded System	Hiteshkumar J. Lad Vibhuthikumar G. Joshi	
460	Design and Optimization of Switch Board Controller	Adesh Panwar	
491	Smart Aqua Meter	Sharath V.C. Suhas S. Sachin Jain B.N. Vinay Kumar S.B. Prasanna Kumar C.	
Computing-2			
Paper ID	Title of the Paper	Authors Name	Page
98	Different Approaches for Dynamic Requirement Engineering Process Models: Cone and Hour Glass Model	Swarnalatha K. S. G. N. Srinivasan Harshwardhan V. Rawoot Rakesh R. Nishkarsh Singh	
246	Digital Telemammography Service for Rural India Software Components and Design Protocol	Kiran Kumari Patil Syed Thouheed Ahmed	
263	Influence of Domain and Technology upon Scope Creep in Software Projects	K. Lakshmi Madhuri Suma V.	
348	Application of Polyglot Persistence to Enhance Performance of the Energy Data Management Systems	Srikrishna Prasad Avinash S. B.	
458	Architecting a Large-Scale Ubiquitous E-voting Solution for Conducting Government Elections	Kausal Malladi Srivatsan Sridharan L. T. JayPrakash	

Electronic Circuits and Systems-1

Paper ID	Title of the Paper	Authors Name	Page
204	Nanosecond Delay Level Shifter with Logic level Correction	Srinivasulu Gundala Venkata K. Ramanaiah Padmapriya Kesari	
367	Design & Implementation of WDF for Digital Down Converter on FPGA for LTE Application	Rashmi M. Mani Abdul Imran Rasheed	
235	Design of Fifth Order Elliptic Filter with Single Opamp-Resonator	Sunita Arvind Rathod Siva Yellampalli	
487	A Novel Design of Cascading Serial Bit Stream Full Comparator using QCA	D. Ajitha K. Venkata Ramanaiah V. Sumalatha	
369	Study of Device Physics In Impact Ionisation MOSFET using Synopsys TCAD Tools	Shruthi A. S. Archana A. M. Ponni M. Pukhraj Vaya	

Electronic Circuits and Systems-2

Paper ID	Title of the Paper	Authors Name	Page
206	FPGA Based 1 Channel Fiber Optic Analog Signal link using 8B/10B Encoding Scheme	Eaglekumar G. Tarpara Jignesh Soni Naresh Patel	
226	Design and Analysis of Low Noise Amplifier using Active Feedback for Boundary Layer Radar	B. T. Venkatesh Murthy I. Srinivasa Rao	
257	High Performance using Synchronous Elastic Circuit with Lower Overheads	Wasundhara D. Paliwal P. V. S. Shastry Sudarshan Dighade	
406	Buffer Reduction Algorithm for Mesh-Based Clock Distribution	John Reuben Mohammed Zackriya V. Harish M. Kittur	
453	Junction Temperature Measurement of a LED Street Light using Forward Voltage Method	Shailesh K. R. Ciji Pearl Kurian Savitha G. Kini	

Electronics and Computing

Paper ID	Title of the Paper	Authors Name	Page
7	A Survey on Finite Automata Based Pattern Matching Techniques for Network Intrusion Detection System (NIDS)	Prashantkumar M. Rathod Nilesh Marathe Amarsinh V. Vidhate	
207	Software Birthmark based Theft Detection of Javascript Programs using Agglomerative Clustering and Improved Frequent Subgraph Mining	Swati Patel Tareek Pattewar	
234	Hybrid Optimization Algorithms Resembling the Life Cycles of Organisms of Phylum Cnidaria	Upeka Premaratne Saman Halgamuguey	
238	S Control: Accelerometer-based Gesture Recognition for Media Control	Hareesh S. Chudgar Siddhartha Mukherjee Kulwant Sharma	
384	Energy Efficient Implementation, Power Aware Simulation and Verification of 16-bit ALU using Unified Power Format Standards	Roopa R. Kulkarni S. Y. Kulkarni	

Energy Systems-1			
Paper ID	Title of the Paper	Authors Name	Page
69	Efficient Control Design for Single Phase Grid Tie Inverter of PV System	K. Arulkumar D. Vijayakumar K. Palanisamy	
83	Series Battery Equalization Using Sequential Difference Algorithm	Sagar B. S. B. P. Divakar Venkatesh Prasad K. S.	
300	Operating States And Improved Characteristics of New Z-Source Inverter Topologies	Shilpa A. S. H. Vasanth Kumar Shetty	
321	High-Performance Off-Line Pulse Width Modulation Without Quarter Wave Symmetry For Voltage-Source Inverter	Avanish Tripathi G. Narayanan	
436	Design and Implementation of a Three Level Diode Clamped Inverter for More Electric Aircraft Applications using Hardware in the Loop Simulator	Sona Rebecca Mathew P. V. R. Sai Kiran Manish Anand Adithya Rajeev	
470	Digitally Controlled Autonomous Li-Ion Active Cell Balancing Using Isolated Resonant Reset Forward Converter For Space Applications	Rishivathsala G. Ananda S. Sreekumar V. Nitin D. Ghatpande	
Energy Systems-2			
Paper ID	Title of the Paper	Authors Name	Page
120	Dynamic Performance Analysis of MRAS Based Speed Estimators for Speed Sensorless Induction Motor Drives	Mohan Krishna S. Febin Daya. J.L.	
223	Design and Development of High Frequency 360 Watt RCD Clamp Forward Converter for Radar Applications	Lakshmi D. Usha A. Pramod Kumar Rampelli Sreenivasa Reddy D.	
327	220W DC-DC Converter for Aerospace Applications	Poola Reddi Kiran B.K. Singh Vinod Chippalkatti, T.Kanthimathinathan	
479	Bidirectional Double-Boost DC-DC converter using RCD snubber	Umme Salma Khanum H. M. H.Vasanth Kumar Shetty	
498	Review of Charge Equalization Schemes for Li-ion Battery and Super-Capacitor Energy Storage Systems	Raghu Raman S. X. D. Xue K. W. E. Cheng	
500	Design, Implementation and Comparative Analysis of an 18-Pulse Input Fly-back Converter Based Switched Mode Power Supply	Sachin S. Shrikant Misal	
Energy Systems-3			
Paper ID	Title of the Paper	Authors Name	Page
107	Study of Grid connected Solar Photovoltaic System using Real Time Digital Simulator	Harshid Sridhar Meera K. S.	
211	Fault Analysis in Three Phase Transmission Lines Using k-Nearest Neighbor Algorithm	Anamika Yadav Aleena Swetapadma	

Paper ID	Title of the Paper	Authors Name	Page
309	Modified GSO for Combined Economic Emission Load Dispatch with Valve-Point Effect	K. C.Meher R. K. Swain C. K. Chanda	
355	Reliability Assessment of Special Protection System at Kolar HVDC Station	Binod Adhikari Chandrashekhara A. Badachi	
408	Fractional Frequency Transmission System to Enhance Line Load ability in EHVAC & UHVAC Long Transmission Line	B. S. Mohan Shankaralingappa C. B. R. Prakash	
450	Preliminary Investigation on Bearing Fault Analysis in Three Phase Induction Motor by MEMS Accelerometer	Maruthi G. S. Vishwanath Hegde	

VLSI

Paper ID	Title of the Paper	Authors Name	Page
106	VLSI Architectures for Givens Rotation Based RLS Lattice Ladder FIR Filter Algorithms using Circular Buffer Technique	Asif Ahmad A. S.	
176	An Algorithmic Approach for Leakage Current Reduction in Deep Sub-Micron CMOS Circuits	Manikya Vara Prasad Done Uday Panwar Kavita Khare	
241	Design And Analysis Of ESOP Based Online Testable Reversible SRAM Array	Nagamani A. N. Vinod Kumar Agrawal Ramya M. Bhat Shrilakshmi N. K. Vijaya K. Sonnad	
252	Simulation and Analysis of Through Silicon Via (TSV)Based Inductance Structures	Poornima Pattanashetti G. H. Sarma	
337	VLSI Implementation of Discrete Cosine Transform and Intraprediction	Vanishree P. T. Vijaya Prakash A. M.	
428	Design of Speed and Power Efficient Multipliers using Vedic Mathematics with VLSI Implementation	Savita Patil D. V. Manjunatha Divya Kiran	
314	Comparative Analysis of Different Optimization Techniques for Sobel Edge Detection on FPGA	Lavanya K. B. K. V. Ramana Reddy Siva S. Yellampalli	