

2015 2nd International Conference on Signal Processing and Integrated Networks

(SPIN 2015)

**Noida, Delhi-NCR, India
19-20 February 2015**

Pages 1-519



**IEEE Catalog Number: CFP15SPJ-POD
ISBN: 978-1-4799-5992-1**

TABLE OF CONTENTS

SESSION : ANTENNA

1	Real Time Tracking Of TV Satellites On Moving Vehicles Using Kalman Filter Faith Kocadag , Askin Demirkol	1
2	Design Of Rectangular Microstrip Patch Antenna Based On Artificial Neural Network Algorithm Bablu kumar Singh	6
3	Comparitive Study Of Coplanar Waveguide Feed And Microstrip Feed For Log Periodic Antennas A.Veeramani , Ravi Prakash Dwivedi	10
4	Design And Simulation Of Wideband Patch Antenna For Wireless Applications A. Veeramani , Usha Kiran Kommuri , Ravi Prakash Dwivedi	15
5	High Gain Antenna With DGS For Wireless Applications Anuja Raj N , Ravi Prakash Dwivedi	19
6	Return Loss and Bandwidth Enhancement of Microstrip Antenna using Defected Ground Structure (DGS) Partha Kumar Deb ,Tamasi Moyra , Priyansha Bhowmik	25
7	Dual Band Multilayer E-Shape Microstrip Patch Antenna For C-Band And X-Band Partha Kumar Deb ,Tamasi Moyra , Priyansha Bhowmik	30
8	Low Return Loss Slotted Rectangular Microstrip Patch Antenna at 2.4 GHz Kumaresh Sarmah , Angana Sarma , Kandarpa Kumar Sarma	35
9	A Coplanar Pentagonal Antenna For Wireless Applications Jesmi Alphonsa, Anand R , Sreedevi Menon, Sethuraman Rao	40
10	On the Use of Eigenvectors in Multi-Antenna Spectrum Sensing with Noise Variance Estimation Daniel Riviello , Pawan Dhakal , Roberto Garello	44
11	High Gain Dual Band Antenna Using Fractal Geometry for Mobile Communication Ravi Prakash Dewivedi , Devyanshu Upadhyay	50
12	Design Of A Novel Compact Planer Monopole UWB Antenna with Triple Band-Notched Characteristics Sanjiv Tomar , Ajay Kumar	56
13	A Compact Step Shape Fed Monopole Microstrip Antenna for UWB Application M.M. Sharma , H.S. Mewara , Gaurav Kumar	60
14	Improvement Of Parallel Coupled Bandpass Filter Using Coupled Closed Loop Square Resonator Structure Puspendu Bikash Saha , Sourav Roy , Manik Bhowmik	65

15	On Chip ACPW Fed Monopole Antenna Aiswarya T Das , Bhunvana Nair S , Sreedevi K Menon	69
16	Dual Polarized Compact Microstrip Antenna For S-Band And C-Band Application Sonal Trivedi , Rajeev Thakur ,Saket Kumar	72
17	Improved Self Optimized Variable Antenna Array Amplitude Tapering Scheme To Combat Cell Size Breathing In UMTS And CDMA Networks Archiman Lahiry , Amlan Datta, Satyabrata Maiti	77
18	Design of an X-Band Conformal Antenna Using Microstrip Patches Prateek Chopra , Megha Bhandari , Dr. K.S Beenamole , Sanjeev Saxena	83
19	Design Of A Passive Integrated Antenna At 5.2 Ghz Habiba Irshad , R Gowri	88

SESSION : BIOMEDICAL IMAGE PROCESSING

20	Dynamic Spectral Subtraction on AWGN Speech Sukanya Sagarika Meher , Ananthakrishna T	92
21	Detection Of Brain Tumor In MRI Images, Using Combination Of Fuzzy C- Means And SVM Parveen , Amritpal Singh	98
22	Detection of Attributes for Bengali Phoneme in Continuous Speech using Deep Neural Network Tanmay Bhowmik , Sankar Mukherjee , Shyamal Kumar Das Manda	103
23	A Combined Watershed Segmentation Approach Using K-Means Clustering for Mammograms Jaya Sharma , Jaynendra Rai , R P Tewari	109
24	Fast Fully Automatic Multiframe Segmentation of Left Ventricle in Cardiac MRI Images Using Local Adaptive K-Means Clustering and Connected Component Labeling Ayush Goyal , Anupama Bhan, Vinayak Ray	114
25	Image Compression on Biomedical Images using Predictive Coding with help of ROI Sadhana Singh , Manvi Mishra , Prof. Prabhakar Gupta	120
26	Expressive Speech Synthesis using Prosodic Modification for Marathi Language Manjare Chandraprabha Anil, S. D. Shirbahadurkar	126
27	Restoration of Retina Images using Extended Median Filter Algorithm Subbuthai Petchimuthu , Muruganand S	131
28	Extraction of Retinal Vasculature by using morphology in Fundus Images Namita Sengar , Malay Kishore Dutta , Parthasarathi Mangipudi, Radim Burget	139

29	An Adaptive Threshold Based Algorithm for Optic Disc and Cup Segmentation in Fundus Images Ashish Issac , Parthasarathi Mangipudi , Malay Kishore Dutta	143
30	Medical Image Fusion by Combining SVD and Shearlet Transform Biswajit Biswas , Somoballi Ghoshal , Pubali Chatterjee , Kashi Nath Dey , Amlan Chakrabarti	148
31	An improved directional distance filter for multi-band images Shveta Mahajan , Amitava Das	154
32	Retinal Verification Using Point Set Matching Bijay kumar Ekka, Niladri Puhan , Rashmi Panda	159
33	A Simple Method for Detection and Classification of ECG Noises for Wearable ECG Monitoring Devices Udit Satija , Barathram. Ramkumar , M. Sabarimalai Manikandan	164

SESSION : BIOMEDICAL SIGNAL PROCESSING

34	Respiratory motion prediction using moving window based online training approach for LS-SVM Tatinati Sivanagaraja, Kalyana C. Veluvolu	170
35	A Trick to Improve PRD during Compressed Sensing ECG Reconstruction. Abhishek Sadasivan,Veni Shanmugham,K.A Narayanankutty	174
36	Classification of human emotion from EEG signals using SVM and LDA classifier Aayush Bhardwaj,Ankit Gupta,Pallav Jain,Asha Rani,Jyoti Yadav	180
37	A Novel Unified Framework for Noise-Robust ECG-Based Biometric Authentication Tilendra Choudhary M. Sabarimalai Manikandan	186
38	Design & Development of Low-Cost EOG Acquisition Circuit for HMI Application Satish Kumar,Adyasha Dash,Manoj Kumar Mukul	192
39	Efficacy Of Adaptive Directed Transfer Function for Neural Connectivity Estimation of EEG signal During Meditation Laxmi Shaw,Aurobinda Routray	198

SESSION : COMMUNICATION

40	Development of Lab VIEW Based System for Interfacing with GPS Receiver Priyanka Sharma,Manish Sharma,Ravindra Singh,Sweta Singh	203
41	Outage Analysis Of Free Space Optical Coded Cooperation In Weak Atmospheric Turbulence Ankita gupta , Prabhat kumar Sharma , Parul Garg , Gaurav Sharma	207
42	Comparitive Handoff Performance Evaluation Of SINEMO And Macro Mobility Protocols in NEMO Palash kundu	211

43	Safety Algorithm For Unmanned Vehicle:Garud Purushottam bharadwaj , Abhinash kumar , Purnima , Puneet singh	217
44	Effect Of Colluding Attack In Collaborative Spectrum Sensing Suchismita Bhattacharjee,Roshini Rajkumari , Ninjinla Marchang	223
45	A Novel Sierpinski Carpet Fractal Based Photonic Band Gap Structure For THz And Optical Communication applications Biswajeet Mukherjee	228
46	Simulation study of double threshold energy detection method for cognitive radios Pankaj varma , Brahmjit Singh	232
47	Design of a Few Interleaver Techniques used with Gold Codes in Faded Wireless Channels Barnali Das , Manash Pratim Sarma , Kandarpa Kumar Sarma,Nikos Mastorakis	237
48	AR- Model Of Faded MIMO Setup Optimized For ITU Channels Murchane Baruah , Aradhana Misra , Kandarpa Kumar Sarma	242
49	DWT based Multi Carrier CDMA System using ANN-Aided Channel Estimation Mayurakshi Roy Medhi, Kandarpa Kumar Sarma	248
50	Generation of Orthogonal Logistic Map Sequences for Faded Channels in Spread Spectrum Modulation Katyayani Kashyap , Kandarpa Kumar Sarma , Nikos Mastorakis,Manash Pratim Sarma	253
51	Analytical model of Cooperative MIMO Channel under Severe Fading Ankumoni Bora, Kandarpa Kumar Sarma	259
52	Spectrum Allocation in Cognitive Radio Networks using Multi-Objective Differential Evolution Algorithm Kiran Kumar Anumandla,Bharadwaj Akella , Siba Kumar Udgata , Samrat Sabat	264
53	Logistic Map Based Spread Spectrum Modulation In Faded Wireless Channel Katayayani Kashyap , Kandarpa Kumar Sarma , Nikos Mastorakis , Manash Pratim Sarma	270
54	Compressed Sensing Based Blind Spectrum Sensing In Cognitive Radio Udit Satija , Parthapratim De	275
55	RS-LDPC Product Code For High SNR Applications Yesha Padia , Himanshi Jadawala , Dhaval Sha	280
56	Hybrid GA-PSO Trained Functional Link Artificial Neural Network Based Channel Equalizer Ayush Utkarsh,Aditya S. Kantha , J.Praveen , Dr. J. Ravi Kumar	285
57	On the Ideality of Cross-Correlation Properties for concurrent use of $(N^2, N^2, 2N \times 2N)$ and $(N^2, N^2, N \times N)$ of Complete Complementary Codes Monika Davidekov	291

58	The BER Analysis Of The High Altitude Platforms Assisted Long Range Cooperative Communication Prabhat Sharma , Parul Garg , Gaurav Sharma	296
59	Evaluation of Decoding Trade-Offs of Concatenated RS Convolutional Codes and Turbo Codes via Trellis Pavan Kumar C, Pavithra Balaji, R Selvakumar, Raghunadh K Bhattar	300
60	End-to-End Optimal Scheduling Scheme for Multi-hop IEEE 802.16j (WiMAX) Networks D.D.Seth , K. Anil Jaykiran , Hemant Kumar Rath	305
61	Realization of NCMS based on SCPC DAMA for SATCOM Network Trilok Kumar Saini,R. K. Agrawal , M. K. Dhaka , Satyendra Kumar	311
62	Optimal utilization of satellite bandwidth for TDM/TDMA channel access technique Abhishek Kumar Roy ,Trilok Kumar Saini , R. K. Agrawal , M. K Dhaka Satyendra Kumar , Rajneesh Singhal	315
63	A Dissection of Pseudorandom number Generators Ankur Rathi , Divyanjali Sharma , Trishansh Bhardwaj	318
64	Biperiodic structure based band pass filter for CWDM system using photonic Crystal Arpita Sharma , Pawan Kumar Inaniya	324
65	Optimized fuzzy power control over fading channels in spectrum sharing cognitive radio using ANFIS Nandkishor Joshi , Bhawna Jharia	329
66	A Novel Energy Consumption Model using Residual Energy Based Mobile Agent Selection Scheme(REMA) in MANETs R. Valikannu , A. George, S.K.Srivatsa	334
67	Design and Analysis of SCM-RoF System Deploying VCSEL Vivek Ruder Sharma , Meenakshi Sharma	340
68	Gain Flattening Of EDFA In C-Band Using Raman Fiber Amplifier For WDMApplication Meenakshi Sharma , Vivek Ruder Sharma	346
69	Study and Analysis of Adaptive Multitaper Method in Diverse Fading Channels for Cognitive Radio Wasim Arif , Shanidul Hoque , Sanjan Das , Sachin Reddy , Debarati Sen	352
70	Sensing Time Minimization using Pipelining in Two Stage Spectrum Sensing Wasim Arif, Shanidul Hoque , Debarati Sen , Srimanta Baishya, Aakriti Chaubey	359
71	An Onboard Digital Transparent Processor for a Multi-beam Satellite Himanshu M Shah, Pramod Mishra, Neeraj Mishra, Pratik Jain, Md.Azhar Saiyed, Alak Banik	366
72	Climate Divergence – Fact or Fiction: Synoptic characterisation as a methodology for short-to-medium term climate analysis and forecasting Philip Hall	372

SESSION : EMBEDDED AND ROBOTICS

73	Artificial Intelligence for Precision movement Robot Kiran Kumar Lekkala , V. K. Mittal	378
74	Design and Real-Time Implementation of a Fuzzy PI Controller on a Servo Speed Control Application Arijit Ghosh , Satyaki Sen, Chanchal Dey	384
75	Prediction of Formability for Sheet Metal Component using Artificial Intelligent Technique M R Bhatt , S Buch	388
76	Design of a Lead-Lag Compensator for Position Loop Control of a Gimballed Payload Gaurav Verma, Himanshu Verma, Sumit Jambhulkar, Vikas Verma	394
77	Energy Efficient Intra-Hospital Multi-Patient Cardiac Monitoring Through Zigbee Network Shashwat Pathak , Tarique Rashid , Basant Kumar , Arvind Kumar	400
78	VLSI Implementation of Embedded Back-end for Photoacoustic Based Continuous Noninvasive Blood Glucose Monitoring System Pradyut Kumar Sanki	405
79	Mobile Middleware Architecture and Services for Real-time Application Deepanshu Goyal, M. Bala Krishna	411

SESSION : IMAGE PROCESSING

80	Feature Detection And Parameters Calculation Of Arbitrary Ellipse Based On Image Processing Technology Bowen Peng , Shuping Dang, M.K.Dutta	418
81	An Improved Method for Visual Surveillance using Background Subtraction Technique Lavanya Sharma,Dileep Kumar Yadav,Sunil Kumar Bharti	421
82	Frequency Domain Filtering Technique Of Half Tone Images Thulasi Tholeti , Pallavi Ramanujam , Priyanka Ganesh	427
83	A Novel Approach Towards Detecting Faces and Gender Using Skin Segmentation And Template Matching Partha Das , Sauvik Das Gupta , Anirban Sarkar , Soumyadeep Halder , Debashish Kundu , Sudipta Ghosh	431
84	Obstacle Size And Proximity Detection Using Stereo Images For Agile Aerial Robots Shibarchi Majumder , Rahul Shankar , Mani Shankar Prasad	437
85	Continuous Hand Gesture Recognition For English Alphabets Sourav Bhowmick , Anjan Kumar Talukdar , Kandarpa Kumar Sarma	443
86	Using Range Information To Reduce Local Descriptor Computations: A Case Study Stefan Freyr , Bjorn Por Jonsson	447

87	A New Method Of Generating Public Key Matrix And Using It For Image Encryption Animesh Chhotaray , Sukant Chhotaray , Girija Sankar Rath	453
88	Different Face Regions Detection Based Facial Expression Recognition Dhrubajyoti Boruah,Kandarpa Kumar Sarma,Anjan Kumar Talukdar	459
89	Application Of Fuzzy Sets To Calculate The Value Of Soft Threshold For Image Denoising Soumava Kumar Roy , Utkarsh Agrawal , Brijraj Singh	465
90	A DWT Based Steganography Scheme With Image Block Partitioning Sabyasachi Kamila , Ratnakirti Roy , Suvamoy Changder	471
91	Adaptive Saliency-Weighted Obstacle Detection For The Visually Challenged Anindya Poddar , S. Tanveer Ahmed , N.B. Puhan	477
92	A Novel Feature Extraction Approach for Online Bengali and Devanagari Character recognition Rajib Ghosh , Partha Pratim Roy	483
93	Hand Gesture Recognition Using Discrete Wavelet Transform And Support Vector Machine Rajat Agarwal , Balasubramanian Raman, Ankush Mittal	489
94	A Novel Feature Learning For Image Classification Using Wrapper Approach In GA Ankur Bist , Neha Pandey, B. K. Singh	494
95	Leaf Disease Detection And Grading Using Computer Vision Technology And Fuzzy Logic Shanu Sharma,Aakanksha Rastogi , Ritika Arora	500
96	Texture Analysis And Classification Of Polarimetric SAR Images Sachin Kumar , Neha Melkani , Nidhi Awasthi , Rishi Prakash	506
97	A Novel Probabilistic Approach Of Colored Object Detection And Design Of A Gesture Based Real-Time Mouse Tracking Along With Virtual Teaching Intended For Color-Blind People Abhinaba Bhattacharya , Indrani Jana , Sauvik Das Gupta , Anukana Das , Debasish Kundu,Sudipta Ghosh	512
98	Image Enhancement By Scaling The Discrete Wavelet Coefficients Based On Segmentation Naman Garg , Akshita Angra , Prateek Sengar	520
99	Multi-Focus Image Fusion Method Based On Linked Twist Map (LTM) In Shearlet Domain Biswajit Biswas , Pubali Chatterjee, Somoballi Ghoshal , Amlan Chakrabarti, Kashi Nath Dey	526
100	An Improved Edge Detection Using Morphological Laplacian Of Gaussian Operator Ashish Anand , Sanjaya Shankar Tripathy, R. Sukesh Kumar	532
101	A Perception Based Color Image Adaptive Watermarking Scheme In YCbCr Space Aniket Roy , Arpan Kumar Maiti , Kuntal Ghosh	537

102	Iris Image Compression Using Wavelets Transform Coding Arnob Paul , Tanvir Zaman Khan , Prajoy Podder , M. Muktadir Rahman , Mamdudul Haque Khan,Rafi Ahmed	544
103	Fuzzy Contrast Mapping For Image Enhancement Anita Thakur , Deepak Mishra	549
104	Automatic Indian Currency Denomination Recognition System Based On Artificial Neural Network Mriganka Gogoi , Syed Ejaz Ali , Subra Mukherjee	553
105	Rayleigh Based Bilateral Filtering For Flash And No-Flash Image Pairs Abhijeet Kumar Sinha , Vikrant Bhateja , Anand Sharma	559
106	Single Image Dehazing Using Improved Dark Channel Prior Yogesh Kumar , Jimmy Gautam, Ashutosh Gupta, Bhavin V. Kakani	564
107	Speech Emotion Recognition Using SVM With Threshold Fusion Shilpi Gupta, Anu Mehra, Vinay Choudhary	570
108	Pixel Based Object Tracking Kiran Phalke , Ravindra Hegadi	575
109	Detection of Oil Spills Using Feature Extraction and Threshold Based SegmentationTechniques Divya Gupta , Anupama Bhan, Garima Vyas	579
110	Wavelet Based Fusion Of Fuzzy Enhanced Images Captured Under Improper Illumination Deepak Gambhir , Meenu Manchanda	584

SESSION : NETWORK & SECURITY

111	A Hybrid PAPR Reduction Technique Based On Wavelet & PTS Scheme In OFDM System Using QPSK Modulator Gaurav Chandra , Pratibha Bharti	589
112	Early-Word-Based Montgomery Modular Multiplication Algorithm Rupali Verma , Maitreyee Dutta , Renu Vig	595
113	A Novel Realization of Reversible LFSR for its Application in Cryptography Prasoon Lata Singh, Alak Majumder, Barnali Chowdhury, Ranvijay Singh, Nikhil Mishra, Abir Jyoti Mondal	601
114	Knowledge Structuring And Reuse System Design Using RDF For Creating A Market Of Data Teruaki Hayashi , Yukio Ohsawa	607
115	DNS Traffic Analysis For Malicious Domains Detection Ibrahim Ghafir , Vaclav Prenosil	613

116	Performance Study Of Some Dynamic Load Balancing Algorithms In Cloud Computing Priyadarashini Adyasha Pattanaik, Sharmistha Roy , Prasant Kumar Pattnaik	619
117	Design Of Dual Band Sawtooth Patch Antenna Using PBG Structure Shweta Yadav , Jimmy Gautam, Mayank Rai	625
118	A Universally Verifiable Blind Signcryption Scheme with Message Recovery Sujata Mohanty , Manikant Prasad	630

SESSION : RF & MICROWAVE

119	Designing of Double Negative Media Based Low Pass Microstrip Filter Using Stepped Impedance Deepti Gupta , Kratika Chaurasia , Akansha Rathor , Dr. P.K. Singhal	633
120	Miniaturization and Bandwidth Enhancement of a Loose coupler by DGS Priyansha Bhowmik , Tamasi Moyra , Partha Kumar Deb	638
121	Size Miniaturization of 3 dB Branch Line Coupler by using Open Stubs Priyansha Bhowmik , Tamasi Moyra , Partha Kumar Deb	642
122	Design and Development of On-Chip Coplanar Strip Open Loop Resonator Filter Gowri Lal , Lekshmy B.S ,Gayathri Narayanan, Sreedevi K Menon	646
123	Compact Microstrip Parallel Coupled Bandpass Filter With A Centre Frequency of 2.4 GHz Suitable For Bluetooth And GPS Communications Puspendu Bikash Saha , Sourav Roy , Manik Bhowmik	650
124	Analysis Of Dual-Band Hairpin Resonator Filter Lekshmy B S , , Gowri Lal , , Gayathri Narayanan , , Sreedevi K. Menon	655

SESSION : SIGNAL PROCESSING

125	A Fuzzy-GRNN Classifier For Pattern Recognition Prabha Verma , Prashant Singh ,RDS Yadava	659
126	Shape Matching And Feature Extraction Of Cross Based On Fourier Transform And Specific Spatial Matching Bowen Peng , Shuping Dang , Nadim Hossain , M.K.Dutta	662
127	An Optimization Technique For QMF Based On Modified Particle Swarm A.R.Verma , B.S.Ghugtyal , Y.Singh , Vivek Joshi	666
128	Specification Of Mixed Bilinear Time Series Models Kuldeep Kumar , Ping Zhang	670
129	Dialectal Assamese Vowel Speech Detection Using Acoustic Phonetic Features,KNN and RNN Mridusmitha Sharma , Kandarpa Kumar Sarma	674

130	An Investigation Into Classification Of Infant Cries Using Modified Signal Processing Methods Shubham Asthana , Naman Varma , Vinay Kumar Mittal	679
131	Comparison of Two Speech Communication Codecs for Transmitting Voice/Speech over Zigbee Kota Solomon Raju, Abhinav Sharma	685
132	Composite Feature Set For Mood Recognition in Dialectal Assamese Speech Swapna Agarwalla , Kandarpa Kumar Sarma	691
133	EKF With PSO Technique For Delineation Of P And T Wave In Electrocardiogram(ECG) Signal M. Rakshit , D. Panigrahy , P.K. Sahu	696
134	Job Shop Scheduling Problem With Heuristic Genetic Programming Operators Lukas Povoda , Radim Burget , Jan Masek , Malay Kishore Dutta	702
135	Automatic Modulation Classification Using S-Transform Based Features Udit Satija , Madhusmita Mohanty, Barathram. Ramkumar	708
136	Keyword and Keyphrase Extraction from Single Hindi Document using Statistical Approach Sifatullah Siddiqi ,Aditi Sharan	713
137	Fault Analysis In Transmission Lines Using Neutral Network And Wavelets Mamta Patel , R N Patel	719
138	Forecasting Seasonal Time Series with Functional Link Artificial Neural Network Ina Khandelwal , Udit Satija , Ratnadip Adhikari	725
139	Analysis Of Shape And Orientation Recognition Capability Of Complex Zernike Moments For Signed Gestures Kalpna Sharma , Garima Joshi , Dr. Maitreyee Dutta	730
140	Improving Accuracy Of Glottal Closure Instant Detection Methods In Nonstationary Noise Pranav S. Deshpande, M. Sabarimalai Manikandan	736
141	Effective Sample Length Selection To Avoid Dead Zone Effect In Ball Mill Vibration Signal Analysis And Application Satish Mohanty , Karunesh K. Gupta , Kota Solomon Raju	742
142	Computer Assisted Interactive System: Understanding Its Implications On Psychophysiology Taruna Yadav , Uttama Lahiri	746
143	Spectral Noise Reduction and Smoothing Using Local Cubic Least Square Regression From Hyperion Reflectance Data Mahendra Pal, Alok Porwal	752
144	Gesture Signals Processing for a Silent Spybot N Sai Chinmayi , Chikkala Hasitha , Balagala Sravya , Vinay Kumar Mittal	756

145	Algorithm For Power Swing Protection Using DSP Based Numerical Relay Shanker Warathe , R.N Patel	762
146	Synthesis Of Flash And No-Flash Image Pairs Using Guided Image Filtering Anand Sharma , Abhijeet Kumar Sinha , Vikrant Bhateja	768
147	Infrared Thermography for Determination of Wavelength of Microwave Signals from Interference Pattern Khalid Muzaffar , Suneet Tuli , Shibam Koul	774

SPECIAL SESSION : BBS

148	Face Recognition using Augmented Local Binary Patterns and Bray Curtis Dissimilarity Metric Radhey Shyam , Yogendra Narain Singh	779
149	Cancelable Iris Template Generation using Look-up Table Mapping Rudresh Dwivedi , Somnath Dey	785
150	Gait Recognition Using Gait Gaussian Image Parul Arora , Smriti Srivastava	791
151	A Quality Aware Technique for Biometric Recognition Piyush Joshi , Surya Prakash	795
152	Enhanced Fingerprint Shell Syed Sadaf Ali , Surya Prakash	801
153	Face Recognition Using Generalized Self Organising Map Based on PCNN Features Poonam Sharma,K. V. Arya, R. N. Yadav	806

SPECIAL SESSION : CSPGNSS

154	Anomalous ionospheric signature observed at Noida (adjoining Delhi, India) during earthquake in Pakistan on September 24, 2013 Tanmay Das, Ashik Paul, Parmeswar Banerjee	811
155	Forecasting of Ionospheric time delays using ARMA model under Geomagnetic storm conditions D Venkata Ratnam , M.Harshali ,M.Venu Gopala Rao	815
156	Usefulness of Truncation of Full Length Pseudo Random Sequence for CDMA Communication. P. Banerjee , Geetanjali Raj , Kanupriya Attrey , Monica Kaushik	819
157	Characteristics of Auto Correlation function for Truncated PN Sequence Subjected to BOC Modulation P. Banerjee , Geetanjali Raj , Kanupriya Attrey , Monica Kaushik	823

SESSION : VIDEO PROCESSING

158	Optimum Storage Finding in Video on Demand System Soumen Kanrar , Niranjan Kumar Mandal	827
159	Algorithm for Secure Visual Communication Manoj K. Mishra , Sandeep Singh Sengar,Susanta Mukhopadhyay	831
160	A Method for Multi-projector Seamless Tiled Display System Mingyu Wang , Yan Han , Rui Wang , Xiaopeng Liu	837
161	Emotional States Discrimination in Voice in Secure Environments Malay Kishore Dutta, Anushikha Singh , Josué Cabrera , Jesús B. Alonso, Carlos M. Travieso , Miguel A. Ferrer , Patricia Hernández	843
162	Unusual Event Detection in Low Resolution Video for enhancing ATM security Sudhir Goswami , Jyoti Goswami , Nagresh Kumar	848
163	Lagrangian support vector regression based image watermarking in wavelet domain Rajesh Mehta , Navin Rajpal , Virendra P. Vishwakarma	854

SESSION : VLSI

164	HSUL Based 802.11 WLAN Channel Specific Energy Efficient ALU Design on FPGA Shaina Verma , Bishwajeet Pandey, Divya Gaba	860
165	Device Bias Technique to Improve Design Metrics of 6T SRAM Cell for Subthreshold Operation Soumitra Pal , Aminul Islam	865
166	Analysis Of Ternary Multiplier Using Booth Encoding Technique Khushdeep Kaur , Preeti Singh , Garima Joshi	871
167	CMOS-based chebyshev current mode ladder bandpass filter Aphinat Tiamsuphat , Pipat Prommee	876
168	Design of a transmit-receive(T/R) switch in TSMC 180 nm for 2.4GHz transceiver Rajendra D. Kanphade , Santosh B. Patil	881
169	A 5-5.47GHz LC-VCO Using Varactor Configuration In 0.18um CMOS Technology Mayanka dixit , Dr. S.C. Shrivastava , Priyanka Dixit	887
170	CMOS implementation of efficient 16 bit square root carry-select adder Shamim Akhter , saurabh chaturvedi , kilari pardhasardi	891
171	A Novel Power Gating Technique for 3-Bit Flash Analog to Digital Converter Anshul Pathak, Shyam Akashe	897

172	Run-Time Reconfigurable Multi-Precision Floating Point Multiplier Design For High Speed Low- Power Applications Arish S , R.K.Sharma	902
173	An Efficient Design Technique For Low Power Dynamic Feedthrough Logic With Enhanced Performance For Wide Fan-In Gates Arjun Dev , R.K. Sharma	908
174	New realizations of OTRA based sinusoidal oscillator Rajeshwari Pandey , Neeta Pandey , Gurumurthy Komanapalli , Alok Kumar Singh , Rashika Anurag	913
175	Linear Phase Detector Using OTRA Rajiv Ranjan, Rajeshwari Pandey, Neeta Pandey, Gavendra Singh	917
176	Ultra Low-power Bulk and Gate-driven, Class AB, Sub-threshold Transconductor Tripurari Sharan , Vijaya Bhadauria	921
177	RTL Implementation for AMBA ASB APB Protocol at System on Chip Level Kiran Rawat , Kanika Sahni , Sujata Pandey	927
178	Design of Hybrid Full Adder in Deep Subthreshold Region for Ultralow Power Applications Manisha Guduri , Aminul Islam	931
179	Analysis and Comparison of Leakage Power Reduction Techniques in CMOS circuits Nidhi Gaur , Smita Singhal , Anu Mehra , Pradeep Kumar	936
180	Analysis and Implementation Of Ripple And Area Efficient Charge Pump Circuits Vipul Bhatnagar , Sujata Pandey , Pradeep Kumar	945
181	An Approach for Analytical Modeling and Simulation of Gate All Around MOSFET for 50 nm technology Dhruba Ghosh , Paurush Bhulania , Sunil Kumar	950
182	Performance Comparison Of 6T SRAM Cell Using Bulk MOSFET And Double Gate Jaya Gautam , Dinesh Vishwakarma , Rajiv Kapoor	954
183	Reconfigurable Architecture Design Of FIR and IIR in FPGA Arnob Paul , Mehedi Hasan , Prajoy Podder , Tanvir Zaman Khan, Tanveer Ahmed	958
184	A Proposed Low-Offset Sense Amplifier For SRAM Applications Anil Kumar Gundu , Wazir Singh , Sai Manoj Divi	964
185	Dynamic Threshold Source Coupled Logic With Pushpull Topology For Ultra Low Power Applications Rajat Arora , Prateek Khurana	968

SESSION : WIRELESS SENSOR NETWORK

186	Energy Efficient Railway Track Security Using Vibration Sensing Network Saurabh Maheshwari , Md.Faruqul Islam , Yogesh Kumar	973
187	Efficient Dynamic Caching for Geocast Routing in VANETs Durga Prasada Dora , Sushil Kumar , Omprakash Kaiwartya	979
188	Redundancy Aware Data Aggregation for Pest Control in Coffee Plantation using Wireless Sensor Networks Roshan Zameer Ahmed , Rajashekhar C. Biradar	984
189	Energy Efficient Clustering Algorithm for WSN Prerna , Sanjay Kumar	990
190	A System for Frame Collision Detection Based on Power Sensing and Time- Domain Signal Processing in Wireless LAN Peng Shao , Akira Matsumoto , Peter Davis , Yuki Baba	994
191	Block Interleaver Design for High Data Rate Wireless Networks Kandarpa Kumar Sarma , Nikos Mastorakis , Manash Pratim sarma , Barnali Das	1000
192	Interference Cancellation in Cognitive Radio Networks using Block Diagonalization Shubham Asthana , Gaurav Sharma , Naman Varma , Divyang Rawal	1006
193	FlexEye - A Flexible Camera Mote for Sensor Networks S Sankhar Reddy, Meetha V Shenoy , Anupama K R	1010
194	An Approach towards Identification of Malicious Nodes in Mobile Ad Hoc Networks Parag Kumar Guha Thakurta , Sujoy Sett	1016
195	Multicast Traffic Grooming with Survivability in WDM Mesh Networks Ashok Kumar Pradhan,Kunal Das , Tanmay De	1020
196	Implementation of MPLS routing in traditional LEACH Anuja Arman , Vansha Kher , Tapan Jain, Davinder Singh Saini	1026
197	Towards Long-Term Intracranial Pressure Monitoring Based on Implantable Wireless Microsystems and Wireless Sensor Networks P. M. Mendes, Carlos Abreu, J. Fernandes	1031