



Contents

Preface	1
Trends in Validation of DDoS Research S. Behal, K. Kumar	7
Impact of Processing and Analyzing Healthcare Big Data on Cloud Computing Environment by Implementing Hadoop Cluster S. Rallapalli, R.R. Gondkar, U.P.K. Ketavarapu	16
Study and Performance Analysis of Routing Protocol Based on CBR J. Kumar, A. Singh, M.K. Panda, H.S. Bhadauria	23
Digital Image Steganography Using Variable Length Group of Bits Substitution G. Swain.	31
A Steganographic Method Combining LSB Substitution and PVD in a Block G. Swain.	39
DSPAA: A Data Sharing Platform with Automated Annotation I.P. Keerthana, T. Aby Abahai.	45
Influence of Heat Input and PWHT on the Microstructure and Mechanical Properties in Dissimilar (IS2062-EN8) Welded Joints M.B. Chennaiah, P.N. Kumar, K.P. Rao.	54
Secured Data Transmission Using Wavelet Based Steganography and Cryptography by Using AES Algorithm M.I. Sena Reddy, A.P. Siva Kumar	62
Enhanced Scalable Video Coding Technique with an Adaptive Dual Tree Complex Wavelet Transform B.S. Sunil Kumar, A.S. Manjunath, S. Christopher, R. Menon.	70
Market Basket Analysis: Identify the Changing Trends of Market Data Using Association Rule Mining M. Kaur, S. Kang	78
Fast Data Retrieval and Enhanced Data Security of Cloud Storage in Luby Transform A. Mishra, T.M. Velayutham, C.R.S. Kumar	86
Implementation of ICT and Wireless Sensor Networks for Earthquake Alert and Disaster Management in Earthquake Prone Areas M. ur Rahman, S. Rahman, S. Mansoor, V. Deep, M. Aashkaar	92
A Technique to Preserve Edge Information in Single Image Super Resolution A.J. Shah, S.B. Gupta	100
Biometric Authentication Using Fused Multimodal Biometric D. Jagadiswary, D. Saraswady	109
Image Mining Using Association Rule for Medical Image Dataset J. Deshmukh, U. Bhosle.	117
A Cached Middleware to Improve I/O Performance Using POSIX Interface S. Ambareesh, J. Fathima.	125
Trust Necessitated through Metrics: Estimating the Trustworthiness of Websites H. Singal, S. Kohli	133
Integrated Multiple Features for Tumor Image Retrieval Using Classifier and Feedback Methods B. Jyothi, Y. MadhavelLatha, P.G.K. Mohan, V.S.K. Reddy	141
Cloud Forensics-A Framework for Investigating Cyber Attacks in Cloud Environment S.K. Ahmad Manoj, D.L. Bhaskari	149
Neural Network Based Approach for Stepping Stone Detection under Delay and Chaff Perturbations R. Kumar, B.B. Gupta	155
A Mind Operated Computer Mouse Using Discrete Wavelet Transforms for Elderly People with Multiple Disabilities K.P. Vasavi, P.R.S.S.V. Raju, S. Radhika, G.D.K. Prasad	166
Performance Evaluation of Spread Spectrum System Using Different Modulation Schemes S. Deshmukh, U. Bhosle	176
Keyword Extraction Using Particle Swarm Optimization D. Sowmya, J.I. Sheeba	183
TDHA: A Timestamp Defined Hash Algorithm for Secure Data Dissemination in VANET A. Mondal, S. Mitra	190
CSSXC: Context-Sensitive Sanitization Framework for Web Applications against XSS Vulnerabilities in Cloud Environments S. Gupta, B.B. Gupta	198
Survey on Keypoint Based Copy-move Forgery Detection Methods on Image D. Chauhan, D. Kasat, S. Jain, V. Thakare.	206

Visualizing CCITT Group 3 and Group 4 TIFF Documents and Transforming to Run-Length Compressed Format Enabling Direct Processing in Compressed Domain	
M. Javed, S.H. Krishnanand, P. Nagabhushan, B.B. Chaudhuri	213
Content Based Symmetric Key Algorithm	
M. Shrivastava, S. Jain, P. Singh	222
Fuzzy Based Real Time Control of Induction Motor Drive	
P.M. Menghal, A.J. Laxmi	228
A Novel Video CAPTCHA Technique to Prevent BOT Attacks	
K. Rao, K. Sri, G. Sai	236
Two Dimensionality Reduction Techniques for SURF Based Face Recognition	
A. Vinay, V. Vasuki, S. Bhat, K.S. Jayanth, K.N.B. Murthy, S. Natarajan	241
Application of Time Synchronization Process to Kerberos	
K. Rao, Bharadwaj, N. Ram	249
A Novel Authentication System Based on Hidden Biometric Trait	
S. Kulkarni, R.D. Raut, P.K. Dakhole	255
Proposing Solution to XOR Problem Using Minimum Configuration MLP	
V.K. Singh	263
An Efficient VLSI Architecture for Matrix Based RNS Backward Converter	
B. Rayapudi, I.B.K. Raju, G. Chary, P. Deekonda, P. Ummadisetti	271
Improving Efficiency of Fuzzy Models for Effort Estimation by Cascading & Clustering Techniques	
P. Rama Sree, Ramesh SNSVSC	278
An Analysis of Leaf Chlorophyll Measurement Method Using Chlorophyll Meter and Image Processing Technique	
A.K. Dey, M. Sharma, M.R. Meshram	286
A Novel Strong Password Generator for Improving Cloud Authentication	
A. Abdellaoui, Y.I. Khamlichi, H. Chaoui	293
COGOM: Cognitive Theory Based Ontology Matching System	
K. Saruladha, S. Ranjini	301
Review on Techniques and Steps of Computer Aided Skin Cancer Diagnosis	
P. Mehta, B. Shah	309
Cross Domain Recommendation Using Semantic Similarity and Tensor Decomposition	
V. kumar, K.M. PD Shrivastava, S. Singh	317
Comparative Analysis of Black Hole Attack in Ad Hoc Network Using AODV and OLSR Protocols	
K.S. Praveen, H.L. Gururaj, B. Ramesh	325
Area and Power Optimized DTMF Detection by Using Different FPGA's	
S.N. Bhavanam, P. Siddaiah, P.R. Reddy	331
Design of a Novel Coaxial Feed Triple Frequency Patch Antenna with Slots and Shorting Pin	
S.N. Bhavanam, R.S. Kalyan	345
An UML+Z Framework for Validating and Verifying the Static Aspect of Safety Critical System	
M. Singh, A.K. Sharma, R. Saxena	352
A New Method of Brain Tissues Segmentation from MRI with Accuracy Estimation	
S. Roy, S.K. Bandyopadhyay	362
Features Fusion for Classification of Logos	
N.V. Kumar, Pratheek, V. Vijaya Kantha, K.N. Govindaraju, D.S. Guru	370
Analysis and Design of Triple Band Compact Microstrip Patch Antenna with Fractal Elements for Wireless Applications	
G. Bharti, S. Bhatia, J.S. Sivia	380
Analysis and Design Rectangular Patch with Half Rectangular Fractal Techniques	
S.K. Sidhu, J.S. Sivia	386
Neurocomputational Models for Parameter Estimation of Circular Microstrip Patch Antennas	
J.S. Sivia, A.P.S. Pharwaha, T.S. Kamal	393
Microstrip Patch Antenna Array Design to Improve Better Gains	
V. Midasala, P. Siddaiah	401
Face Recognition System Using Genetic Algorithm	
P. Sukhija, S. Behal, P. Singh	410
Ideal Sampling Rate to Reduce Distortion in Audio Steganography	
R. Ramya Devi, D. Pugazhenthii	418
LSB Layer Independent Robust Steganography Using Binary Addition	
B. Datta, U. Mukherjee, S.K. Bandyopadhyay	425
Cloud Computing Security Using IDS-AM-Clust, Honeyd, Honeywall and Honeycomb	
C. Saadi, H. Chaoui	433
Quad Staircase Shaped Microstrip Patch Antenna for S, C and X Band Applications	
S.S. Sran, J.S. Sivia	443
Location Identification of the Individual Based on Image Metadata	
P.R. Kumar, C. Srikanth, K.L. Sailaja	451

Hybrid Genetic Algorithm for Medical Image Feature Extraction and Selection G. Nagarajan, R.I. Minu, B. Muthukumar, V. Vedanarayanan, S.D. Sundarsingh.	455
Managing Mysql Cluster Data Using Cloudera Impala S. Tummalapalli, V. rao Machavarapu	463
A Generic Algorithm to Improve the Performance of Wireless Sensor Network Protocol K.H. Krishna, Y.S. Babu, T. Kumar	475
Smoothering and Segmentation of ECG Signals Using Total Variation Denoising –Minimization-Majorization and Bottom-Up Approach O.P. Yadav, S. Ray	483
Classification of EEG Motor Imagery Multi Class Signals Based on Cross Correlation D.H. Krishna, I.A. Pasha, T.S. Savithri	490
VLSI –Fuzzy Decision Controller Based ECG Encoder R. Sandanalakshmi, I. Aravindh.	496
Feature Selection Using Relative Fuzzy Entropy and Ant Colony Optimization Applied to Real-time Intrusion Detection System P.R.K. Varma, V.V. Kumari, S.S. Kumar	503
A Novel Approach for Generation of OTP’S Using Image’s K. Srinivas, V. Janaki	511
FPGA Based Denoising Method with T-Model Mask Architecture Design for Removal of Noises in Images N. Rajeswaran, S. Karpagaabirami, C. Gokilavani, R. Rajendran.	519
A Survey of Trust Models for Enterprise Information Systems A. Manna, A. Sengupta, C. Mazumdar	527
Security Algorithms for Cloud Computing A. Bhardwaj, G.V.B. Subrahmanyam, V. Avasthi, H. Sastry	535
Advanced Immediate Crime Reporting to Police in India D. Lal, A. Abidin, N. Garg, V. Deep	543
Hadoop Framework for Entity Resolution Within High Velocity Streams S.P. Benny, S. Vasavi, P. Anupriya	550
The Reverse Engineering of Reverse Encryption Algorithm and a Systematic Comparison to DES Z. Mihret, M.W. Ahmad.	558
Robust Pre-processing Technique Based on Saliency Detection for Content Based Image Retrieval Systems C.A. Hussain, D.V. Rao, S.A. Masthani	571
Comparative Simulation of GaAs and GaN Based Double Barriers-Resonant Tunneling Diode M.M. Singh, M.J. Siddiqui, A. Saxena	581
An Approach to Reduce the Computational Burden of Nearest Neighbor Classifier R.R. Kumar, P. Viswanath, C.S. Bindu	588
Data-local Reduce Task Scheduling J. Geetha, N. UdayBhaskar, P. ChennaReddy	598
Secure Authentication: Eliminating Possible Backdoors in Client-Server Endorsement J.P. Jyotiyana, A. Mishra	606
Modelling and Simulation of Hybrid Transformer Less Grid-tied Inverters for Dye Sensitized Photovoltaic System P. Sudheer, C. Chengaiah	616
CPU Load Analysis & Minimization for TCP SYN Flood Detection D. Kshirsagar, S. Sawant, A. Rathod, S. Wathore	626
Orthogonal Decomposition Algorithm for Ionospheric Delay Estimation for Precise GPS Applications B. Bidikar, G.S. Rao, L. Ganesh, M.N.V.S. Santosh Kumar	634
Modeling and Performance Comparison of two Different Hybrid Multi Level Topologies T.M. Krishna, C.B. Kumar.	641
Medical Image Watermarking Technique in the Application of E- diagnosis Using M-Ary Modulation RituAgrawal, M. Sharma	648
Real Time Energy Management and Load Forecasting in Smart Grid Using CompactRIO K. Thiyagarajan, R.S. Kumar.	656
Correlation Review of Classification Algorithm Using Data Mining Tool: WEKA, Rapidminer, Tanagra, Orange and Knime A. Naik, L. Samant	662
Investigation of Optimal Wavelet Techniques for De-noising of MRI Brain Abnormal Image V. Sowjanya, G.S. Rao, A. Sarvani	669
Performance Analysis of Hyperbolic Multilateration Using Circular Error Probability D.E. Chaitanya, L. Ganesh, G.S. Rao	676
A Robust GPS Signal Acquisition Technique Using Discrete Wavelet Transform S.F. Ahamed, G.S. Rao, L. Ganesh	683
Varying Illumination and Pose Conditions in Face Recognition M. Singh, A.S. Arora	691
Teletraffic and Blocking Probability Estimation of OFDMA System G.S. Rao, C.V. Rao, K.S. Prasad	696

A Suitable Approach in Extracting non Event Related Potential Sources from Brain of Disabled Patients S. Gotham, G.S. Rao	705
Image Interpolation Based on Multi Scale Gradients G.S. Sreepadha	713
Classifier Ensemble Design for Imbalanced Data Classification: A Hybrid Approach U.R. Salunkhe, S.N. Mali	725
An Anatomization of Aadhaar Card Data Set—A Big Data Challenge M. Dayal, N. Singh	733
TDOA Measurement Based GDOP Analysis for Radio Source Localization G. Laveti, G.S. Rao, D.E. Chaitanya, M.N.V.S.S. Kumar	740
Image Processing Based Leaf Rot Disease, Detection of Betel Vine (<i>Piper Betle</i> L.) A.K. Dey, M. Sharma, M.R. Meshram	748
Autonomous Control and Implementation of Coconut Tree Climbing and Harvesting Robot A.P. Dubey, S.M. Pattnaik, A. Banerjee, R. Sarkar, R.S. Kumar	755
Student Emotion Recognition System (SERS) for e-learning Improvement Based on Learner Concentration Metric L.B. Krithika, G.G. Lakshmi Priya	767
Fast Fading Mobile Channel Modeling for Wireless Communication V. Lavanya, G.S. Rao, B. Bidikar	777
Expectation–Maximization Based Image Fusion Algorithm for Detection of Underwater Targets from SONAR Images M.N.V.S.S. Kumar, G.S.B. Rao, L. Ganesh, R. Goswami	782
Design and Implementation of 64 Bit IIR Filters Using Vedic Multipliers A. Savadi, R. Yanamshetti, S. Biradar	790
A Survey on Centralised and Distributed Approaches for Subtree Anonymization B. Kakad, J. Patil	798
Arrhythmia Detection Using Wigner-Ville Distribution Based Neural Network S.K. Dash, G.S. Rao	806
Accessing Data by Using Presence Cloud Based Solution for on Demand Services in Wireless Computing Devices M.D. Akhare, N.M. Kandoi	812
An Integrated Approach of Physical Biometric Authentication System R. Malathi, R.J. Retna Raj	820
Demoisaing of Color Images Using RBF Based Neural Network Technique V.N.V. Satya Prakash, K.S. Prasad, T.J.C. Prasad	827
EVM and IVM Dynamics in Cloud Environment S.B. Dash, A. Mishra, T.C. Panda, S. Pani	834
E-Governance Paradigm Using Cloud Infrastructure: Benefits and Challenges S. Dash, S.K. Pani	843
Textile Antenna for Microwave Wireless Power Transmission N.K. Singh, V.K. Singh, B. Naresh	856
Analysis of Data Mining Techniques for Healthcare Decision Support System Using Liver Disorder Dataset T.R. Baitharu, S.K. Pani	862
Stacked Textile Antenna for Multi Band Application Using Foam Substrate N. Gupta, V.K. Singh, Z. Ali, J. Ahirwar	871
Modified Round Robin Algorithm for Resource Allocation in Cloud Computing P. Pradhan, P. Ku. Behera, B.N.B. Ray	878
Analysis of Routing and Forwarding Protocols in Opportunistic Networks C. Prabha, S. Kumar, R. Khanna	891
Fuzzy Analytic Hierarchy Process Based Template Data Analysis of Multimodal Biometric Conceptual Designs A. Selwal, S.K. Gupta, Surender	899
Applying Separation of Concern for Developing Softwares Using Aspect Oriented Programming Concepts A. Kumar, A. Kumar, M. Iyyappan	906
Concept Based Dynamic Ontology Creation for Job Recommendation System U.P.K. Kethavarapu, S. Saraswathi	915
A Design Based New Reusable Software Process Model for Component Based Development Environment J. Sharma, A. Kumar, Kavita	922
Natural Computing for Automatic Test Data Generation Approach Using Spanning Tree Concepts S. Singla, R. Kumar, D. Kumar	929
Challenges and Techniques for Testing of Big Data N. Garg, S. Singla, S. Jangra	940
sEMG Based Human Computer Interaction for Robotic Wheel Chair Using ANN M. Shafivulla	949
Biomedical Image Indexing and Retrieval Descriptors: A Comparative Study G. Deep, L. Kaur, S. Gupta	954

Efficient Heart Disease Prediction System Purushottam, K. Saxena, R. Sharma	962
Railway Reservation Verification by Aadhar Card R. Tanwar, A.K. Nazari, V. Deep, N. Garg.	970
Comparative Analysis of NR and TBLO Algorithms in Control of Cascaded MLI at Low Switching Frequency V.J. Manohar, M. Trinad, K.V. Ramana.	976
Automatic Fault Tolerant Software System for Desktop Grid Middleware R. kumar, S. Jangra	987