## Contents

A Survey of Security Concerns in Various Data Aggregation Techniques in Wireless Sensor Networks .......................................................... 1
Mukesh Kumar and Kamlesh Dutta

Secure and Dynamic IP Address Configuration
Scheme in MANET ........................................................................... 17
Poulami Choudhury, Koushik Majumder and Debashis De

A Novel Distributed Dynamic IP Configuration
Scheme for MANET ........................................................................ 25
Pritam Bag, Koushik Majumder and Debashis De

Dual Security Against Grayhole Attack in MANETs. ...................... 33
Ankit D. Patel and Kartik Chawda

I-EDRI Scheme to Mitigate Grayhole Attack in MANETs ............ 39
Ankit D. Patel, Rutvij H. Jhaveri and Shaishav N. Shah

Frequency Domain Incremental Strategies Over Distributed Network .................................................................................. 45
Siba Prasad Mishra and Ajit Kumar Sahoo

Modeling and Analysis of Cross-Layer Uplink Scheduler in IEEE 802.16e Standard ................................................................. 53
M. Vijayalaxmi, Swaroop R. Puranik and Linganagouda Kulkarni

A Probabilistic Packet Filtering-Based Approach for Distributed Denial of Service Attack in Wireless Sensor Network ............. 65
Sonali Swetapadma Sahu and Manjusha Pandey
Location-Based Coordinated Routing Protocol for Wireless Sensor and Actor Networks ........................................ 71
Biswa Mohan Acharya and S.V. Rao

Bhagwat Prasad Chaudhury and Ajit Kumar Nayak

Performance Analysis of IEEE 802.11 DCF and IEEE 802.11e EDCF Under Same Type of Traffic .......................... 91
Rameswari Biswal and D. Seth

A Distributed Prime Node-ID Connected Dominating Set for Target Coverage Using Adjustable Sensing Range .............. 99
Anita Chandra, Nachiketa Tarasia, Amulya Ratan Swain and Manish Kumar

Token Based Group Local Mutual Exclusion Algorithm in MANETs ................................................................. 105
Ashish Khanna, Awadhesh Kumar Singh and Abhishek Swaroop

A Distributed Secured Localization Scheme for Wireless Sensor Networks ......................................................... 115
Lakshmana Phaneendra Maguluri, Shaik Mahaboob Basha, S. Ramesh and Md Amanatulla

Characteristic Function for Variable-Bit-Rate Multimedia QoS ................................................................. 121
Neela Rakesh and Hemanta Kumar Pati

A Fully Simulatable Oblivious Transfer Scheme Using Vector Decomposition .................................................. 131
Manoj Kumar and I. Praveen

Query by Humming System Through Multiscale Music Entropy .......................................................... 139
Trisiladevi C. Nagavi and Nagappa U. Bhajantri

An Empirical Analysis of Training Algorithms of Neural Networks: A Case Study of EEG Signal Classification Using Java Framework .................................................. 151
Sandeep Kumar Satapathy, Alok Kumar Jagadev and Satchidananda Dehuri
Relating Perceptual Feature Space and Context Drift Information in Query by Humming System .......................... 161
Trisiladevi C. Nagavi and Nagappa U. Bhajantri

First-Fit Semi-partitioned Scheduling Based on Rate Monotonic Algorithm ................................. 173
Saeed Senobary and Mahmoud Naghibzadeh

A Novel Approach for Data Hiding in Color Images Using LSB Based Steganography with Improved Capacity and Resistance to Statistical Attacks ................................. 183
Savita Badhan and Mamta Juneja

A Comparative Study of Correlation Based Stereo Matching Algorithms: Illumination and Exposure ..................... 191
N.S. Bindu and H.S. Sheshadri

A Hybrid Motion Based-Object Tracking Algorithm for VTS ........... 203
Prasenjit Das and Nirmalya Kar

Side Lobe Level and Null Control Design of Linear Antenna Array Using Taguchi’s Method ............................ 211
Rakesh Kumar, Saumendra Ku. Mohanty and B.B. Mangaraj

A Novel Approach for Jamming and Tracking of Mobile Objects ......................................................... 217
Aradhana Misra, Nirmal Kumar Rout and Kaustav Dash

Performance Analysis of Low-Complexity Multiuser STBC MC-CDMA System ........................................ 223
Sadananda Behera and Sarat Kumar Patra

On the Design an Enhanced Bandwidth of Elliptical Shape CPW-Fed Fractal Monopole Antenna for UWB Application ........ 229
Satyabrata Maiti, Naikatmana Pani, Thiyam Romila Devi and Amlan Datta

Design of Microstrip Branch Line Coupler Phase Shifter in L-Band ..................................................... 237
Thiyam Romila Devi, Satyabrata Maiti, Abhishek Jena and Amlan Datta
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capturing Node Resource Status and Classifying Workload for Map Reduce Resource Aware Scheduler</td>
<td>247</td>
</tr>
<tr>
<td>Ravi G. Mude, Annappa Betta and Akashdeep Debbarma</td>
<td></td>
</tr>
<tr>
<td>Grid Computing-Based Performance Analysis of Power System: A Graph Theoretic Approach</td>
<td>259</td>
</tr>
<tr>
<td>Investigation on Power Saving Mechanism for IEEE 802.16m Networks in Mobile Internet Traffic</td>
<td>267</td>
</tr>
<tr>
<td>A. Rajesh and R. Nakkeeran</td>
<td></td>
</tr>
<tr>
<td>Hybrid Edge Detection-Based Image Steganography Technique for Color Images</td>
<td>277</td>
</tr>
<tr>
<td>Deepali Singla and Mamta Juneja</td>
<td></td>
</tr>
<tr>
<td>Haze Removal: An Approach Based on Saturation Component</td>
<td>281</td>
</tr>
<tr>
<td>Khitish Kumar Gadnayak, Pankajini Panda and Niranjan Panda</td>
<td></td>
</tr>
<tr>
<td>Biomedical Image Registration Using Genetic Algorithm</td>
<td>289</td>
</tr>
<tr>
<td>Suraj Panda, Shubhendu Kumar Sarangi and Archana Sarangi</td>
<td></td>
</tr>
<tr>
<td>Bi-dimensional Statistical Empirical Mode Decomposition-Based Video Analysis for Detecting Colon Polyps Using Composite Similarity Measure</td>
<td>297</td>
</tr>
<tr>
<td>Mainak Biswas and Debangshu Dey</td>
<td></td>
</tr>
<tr>
<td>A Wavelet-Based Text-Hiding Method Using Novel Mapping Technique</td>
<td>309</td>
</tr>
<tr>
<td>Tanusree Podder, Abhishek Majumdar, Lalita Kumari and Arpita Biswas</td>
<td></td>
</tr>
<tr>
<td>Unsupervised Segmentation of Satellite Images Based on Neural Network and Genetic Algorithm</td>
<td>319</td>
</tr>
<tr>
<td>P. Ganesan, V. Rajini, B.S. Sathish and V. Kalist</td>
<td></td>
</tr>
<tr>
<td>Comparative Analysis of Cuckoo Search Optimization-Based Multilevel Image Thresholding</td>
<td>327</td>
</tr>
<tr>
<td>Sourya Roy, Utkarsh Kumar, Debayan Chakraborty, Sayak Nag, Arijit Mallick and Souradeep Dutta</td>
<td></td>
</tr>
</tbody>
</table>
An Intelligent Method for Moving Object Detection ............. 343
Mihir Narayan Mohanty and Subhashree Rout

Prediction of Monthly Rainfall in Tamilnadu Using
MSARIMA Models ............................................. 353
S. Meenakshi Sundaram and M. Lakshmi

An Ontology-Based Approach for Test Case Reuse .............. 361
Satish Dalal, Sandeep Kumar and Niyati Baliyan

A Decision-Driven Computer Forensic Classification Using
ID3 Algorithm ................................................. 367
Suneeta Satpathy, Sateesh K. Pradhan and B.N.B. Ray

Non-ideal Iris Segmentation Using Wavelet-Based
Anisotropic Diffusion ........................................... 377
Chinmay Singh, Madhusmita Sahoo and Bibhu Prasad Mohanty

Detection of Video Objects in Dynamic Scene Using Local
Binary Pattern Subtraction Method ............................. 385
Prashant Kumar, Deepak K. Rout, Abhishek Kumar,
Mohit Verma and Deepak Kumar

Automatic Lane Detection in NH5 of Odisha .................... 393
P. Kanungo, S.K. Mishra, S. Mahapatra, U.R. Sahoo,
U. S. Kr. Sah and V. Taunk

Mammogram Image Segmentation Using Hybridization
of Fuzzy Clustering and Optimization Algorithms ............. 403
Guru Kalyan Kanungo, Nalini Singh, Judhisthir Dash
and Annapurna Mishra

A New ICA-Based Algorithm for Diagnosis of Coronary
Artery Disease ................................................. 415
Zahra Mahmoodabadi and Saeed Shaerf Tabrizi

Static Hand Gesture Recognition Based on Fusion
of Moments ....................................................... 429
Subhamoy Chatterjee, Dipak Kumar Ghosh and Samit Ari

Real-Time Human Face Detection in Noisy Images
Based on Skin Color Fusion Model and Eye Detection ....... 435
Reza Azad, Eslam Ahmadzadeh and Babak Azad
Investigation of Full-Reference Image Quality Assessment ............ 449
Dibyasundar Das and Ajit Kumar Nayak

Image Compression Using Edge-Enhancing Diffusion ................. 457
Lipsa Behera, Bibhuprasad Mohanty and Madhusmita Sahoo

Comparative Analysis of Edge Detection Techniques
for Extracting Blood Vessels in Diabetic Retinopathy ............... 465
Sunita Sarangi, Arpita Mohapatra and Sukanta Kumar Sabut

Realization of Different Algorithms Using Raspberry Pi
for Real-Time Image Processing Application ......................... 473
Mrutyunjaya Sahani and Mihir Narayan Mohanty

Edge Preserving Region Growing for Aerial Color
Image Segmentation .................................................. 481
Badri Narayan Subudhi, Ishan Patwa, Ashish Ghosh and Sung-Bae Cho

ILSB: Indicator-Based LSB Steganography .......................... 489
Prasenjit Das and Nirmalya Kar

Odia Running Text Recognition Using Moment-Based
Feature Extraction and Mean Distance
Classification Technique ............................................... 497
Mamata Nayak and Ajit Kumar Nayak

Keyword Extraction from Hindi Documents Using
Statistical Approach ................................................... 507
Aditi Sharan, Sifatullah Siddiqi and Jagendra Singh

Development of Odia Language Corpus from Modern
News Paper Texts: Some Problems and Issues ..................... 515
Bishwa Ranjan Das, Srikanta Patnaik and Niladri Sekhar Dash

A Rule-Based Concatenative Approach to Speech Synthesis
in Indian Language Text-to-Speech Systems ......................... 523
Soumya Priyadarsini Panda and Ajit Kumar Nayak

Author Index ......................................................... 533
Intelligent Computing, Communication and Devices
Proceedings of ICCD 2014, Volume 2
Jain, L.C.; Patnaik, S.; Ichalkaranje, N. (Eds.)
2015, XX, 535 p. 249 illus., Softcover
ISBN: 978-81-322-2008-4