

Contents

Social Media Sentiment Polarity Analysis: A Novel Approach to Promote Business Performance and Consumer Decision-Making	1
Arya Valsan, C.T. Sreepriya and L. Nitha	
Detection of Incongruent Firewall Rules and Flow Rules in SDN	13
Nandita Pallavi, A.S. Anisha and V. Leena	
An Attainment Upgrade in Audio Steganography	23
K. Anupriya, Revathy R. Nair and V. Leena	
A Comparative Study Between Hopfield Neural Network and A* Path Planning Algorithms for Mobile Robot	33
Suhit Atul Kodgule, Arka Das and Arockia Doss Arockia Selvakumar	
Vanishing Point Based Lane Departure Warning Using Template-Based Detection and Tracking of Lane Markers	49
Ammu M. Kumar, Philomina Simon and R. Kavitha	
Destination Proposal System to Forecast Tourist Arrival Using Associative Classification	61
S. Nair Athira, K.E. Haripriya Venugopal and L. Nitha	
Analyzing the Impact of Software Design Patterns in Data Mining Application	73
Nair Puja Prabhakar, Devika Rani, A.G. Hari Narayanan and M.V. Judy	
A Survey for Securing Online Payment Transaction Using Biometrics Authentication	81
M. Hari Priya and N. Lalithamani	
NFC Logging Mechanism—Forensic Analysis of NFC Artefacts on Android Devices	93
Divya Lakshmanan and A.R. Nagoor Meeran	

Control of Quadrotors Using Neural Networks for Precise Landing Maneuvers	103
U.S. Ananthakrishnan, Nagarajan Akshay, Gayathri Manikutty and Rao R. Bhavani	
Superimposed Pilot Based Channel Estimation for MIMO Systems	115
S. Sarayu, Janaki Radhakrishnan and S. Kirthiga	
Artificial Bee Colony Optimization Algorithm for Fault Section Estimation	127
M.A. Sobhy, A.Y. Abdelaziz, M. Ezzat, W. Elkhattam, Anamika Yadav and Bhupendra Kumar	
CSTS: Cuckoo Search Based Model for Text Summarization	141
Rasmita Rautray and Rakesh Chandra Balabantaray	
A New 2D Shape Descriptor Generation Method for Different Craters Based on the Intensity Values	151
R. krishnan and Andhe Dharani	
A TEP-Based Approach for Optimal Thrust Direction of Lunar Soft Landing	159
Naveen Pragallapati and N.V.S.L. Narasimham	
Pre-filters Based Synchronous Rotating Reference Frame Phase Locked Loop (SRF PLL) Design for Distorted Grid Conditions	171
K. Sridharan, B. Chitti Babu, B. Naga Parvathi and P. Kartheek	
Dynamic Performance Enhancement of Three-Phase PV Grid-Connected Systems Using Constant Power Generation (CPG)	187
Rajesh Kasthuri, K. Bhageeratha Reddy, J. Prasanth Ram, T. Sudhakar Babu and N. Rajasekar	
Prediction of Mechanical Soil Properties Based on Experimental and Computational Model of a Rocker Bogie Rover	199
S. Nithin, B. Madhevan, Rima Ghosh, G.V.P. Bharat Kumar and N.K. Philip	
Exploiting VLC Technique for Smart Home Automation Using Arduino	211
K.P. Swain, M.V.S.V. Prasad, G. Palai, J. Sahoo and M.N. Mohanty	
Intuitionistic Hesitant Fuzzy Soft Set and Its Application in Decision Making	221
R.K. Mohanty and B.K. Tripathy	
Multi-document Text Summarization Using Sentence Extraction	235
Ravinder Ahuja and Willson Anand	

Tourism Recommendation Using Social Media Profiles 243
 S. Kavitha, Vijay Jobi and Sridhar Rajeswari

Demand Response Program Based Load Management for an Islanded Smart Microgrid 255
 K. Gokuleshvar, S. Anand, S. Viknesh Babu and D. Prasanna Vadana

Design of 4 × 2 Corporate Feed Microstrip Patch Antenna Using Inset Feeding Technique with Defective Ground Plane Structure 269
 Tharian Joseph Pradeep and G. Kalaimagal

Synergistic Fibroblast Optimization 285
 P. Subashini, T.T. Dhivyaprabha and M. Krishnaveni

Evolvable Hardware Architecture Using Genetic Algorithm for Distributed Arithmetic FIR Filter 295
 K. Krishnaveni, C. Ranjith and S.P. Joy Vasantha Rani

Dynamic Auditing and Deduplication with Secure Data Deletion in Cloud 305
 N. Dinesh and I. Juvanna

Hesitant Fuzzy Soft Set Theory and Its Application in Decision Making 315
 T.R. Sooraj, R.K. Mohanty and B.K. Tripathy

Privacy-Aware Set-Valued Data Publishing on Cloud for Personal Healthcare Records 323
 Elizabeth Alexander and Sathyalakshmi

A Decimal Coded Genetic Algorithm Recommender for P2P Systems 335
 C.K. Shyamala, Niveda Ashok and Bhavya Narayanan

Hybrid Paradigm to Establish Accurate Results for Null Value Problem Using Rough—Neural Network Model 349
 Aishwarya Aresh and B.K. Tripathy

Network Protocol-Based QoS Routing Using Software Defined Networking 363
 P. Shakthipriya and A. Ruhan Bevi

Comparison of GSA and PSO-Based Optimization Techniques for the Optimal Placement of Series and Shunt FACTS Devices in a Power System 375
 Rajat Kumar Singh and Vikash Kumar Gupta

Neural Network-Controlled Wind Generator-Fed Γ -Z Source-Based PMSM Drive 387
 A. Jaffar Sadiq Ali and G.P. Ramesh

Analysis of Power Management Techniques in Multicore Processors	397
K. Nagalakshmi and N. Gomathi	
Comparative Study of Lookup Table Approach of Direct Power Control for Three-Phase DC/AC Inverter	419
Ami Vekariya, Tapankumar Trivedi, Rajendrasinh Jadeja and Praghnesh Bhatt	
Parallel Cache Management with Twofish Encryption Using GPU	441
S. Umamaheswari, R. Nithya, S. Aiswarya and B. Tharani	
Enhanced Single Image Uniform and Heterogeneous Fog Removal Using Guided Filter	453
Pallawi and V. Natarajan	
Multi-objective Genetic Algorithm-Based Sliding Mode Control for Assured Crew Reentry Vehicle	465
Divya Vijay, U. Sabura Bhanu and K. Boopathy	
A Study on Mutual Information-Based Feature Selection in Classifiers	479
B. Arundhathi, A. Athira and Ranjidha Rajan	
Solar PV-Based VFD Fed Permanent Magnet Synchronous Motor for Pumping System	487
Vishnu Kalaiselvan Arun Shankar, Subramaniam Umashankar, Soni Abhishek, Bhimanapati Lakshmi Anisha and Shanmugam Paramasivam	
A Survey on Recent Approaches in Person Re-ID	503
M.K. Vidhyalakshmi and E. Poovammal	
An Analysis of Decision Theoretic Kernalized Rough C-Means	513
Ryan Serrao, B.K. Tripathy and A. Jayaram Reddy	
Hybrid Techniques for Reducing Total Harmonic Distortion in a Inverter-Fed Permanent Magnet—SM Drive System	525
G. Kavitha and I. Mohammed Rafeequdin	
Palm Print and Palm Vein Biometric Authentication System	539
J. Ajay Siddharth, A.P. Hari Prabha, T.J. Srinivasan and N. Lalithamani	
Study of Different Boundary Constraint Handling Schemes in Interior Search Algorithm	547
Indrajit N. Trivedi, Amir H. Gandomi, Pradeep Jangir and Narottam Jangir	

Emotion Recognition from Videos Using Facial Expressions 565
 P. Tamil Selvi, P. Vyshnavi, R. Jagadish, Shravan Srikumar
 and S. Veni

Parse Tree Generation Using HMM Bigram Model 577
 S. Arun, V.V. Vishnu and N. Arun Kumar

**Preserving Privacy in Vertically Partitioned Distributed
 Data Using Hierarchical and Ring Models** 585
 R. Srinivas, K.A. Sireesha and Shaik Wahida

**One-Class Text Document Classification with OCSVM
 and LSI** 597
 B. Shravan Kumar and Vadlamani Ravi

**System Identification: Survey on Modeling Methods
 and Models** 607
 A. Garg, K. Tai and B.N. Panda

**Grid Integration of Small Hydro Power Plants Based
 on PWM Converter and D-STATCOM** 617
 Swayam Samparna Mishra, Abhimanyu Mohapatra
 and Prasanta Kumar Satpathy

**Pragmatic Investigation on Performance of Instance-Based
 Learning Algorithms** 633
 Bharathan Venkatesh, Danasingh Asir Antony Gnana Singh
 and Epiphany Jebamalar Leavline

Identifying Sensitive Attributes for Preserving Privacy 643
 Balakrishnan Tamizhpoonguil, Danasingh Asir Antony Gnana Singh
 and Epiphany Jebamalar Leavline

**Enhanced Vehicle Detection and Tracking System
 for Nighttime** 653
 Ram Y. Wankhede and Diwakar R. Marur

**A Testing + Verification of Simulation in Embedded Processor
 Using Processor-in-the-Loop: A Model-Based
 Development Approach** 665
 Kuman Siddhapura and Rajendrasinh Jadeja

**Interval Type-2 Mamdani Fuzzy Inference System
 for Morningness Assessment of Individuals** 679
 Debasish Majumder, Joy Debnath and Animesh Biswas

**A Novel 2D Face, Ear Recognition System Using Max–Min
 Comparison Technique for Human Identification** 695
 A. Parivazhagan and A. BrinthaTherese

Secure Cloud Storage Based on Partitioning and Cryptography	705
Rakhi S. Krishnan, Ajeesha Radhakrishnan and S. Sumesh	
Analysis of Power Quality in Hostel and Academic Buildings of Educational Institute	713
Mallakuntla Rajesh, K. Palanisamy, S. Umashankar, S. Meikandasivam and S. Paramasivam	
Dynamic Resource Allocation Mechanism Using SLA in Cloud Computing	731
Jayashree Agarkhed and R. Ashalatha	
A Look-up Table-Based Maximum Power Point Tracking for WECS	741
J. Antony Priya Varshini	
Interval Valued Hesitant Fuzzy Soft Sets and Its Application in Stock Market Analysis	755
T.R. Sooraj and B.K. Tripathy	
A Novel Control Strategies for Improving the Performance of Reduced Switch Multilevel Inverter	765
K. Venkataramanan, B. Shanthi and T.S. Sivakumaran	
Implementation of Connected Dominating Set in Social Networks Using Mention Anomaly	777
S. Nivetha and V. Ceronmani Sharmila	
Control of Induction Motor Using Artificial Neural Network	791
Abhishek Kumar, Rohit Singh, Chandan Singh Mahodi and Sarat Kumar Sahoo	
A Novel Image Intelligent System Architecture for Fire Proof Robot	805
B. Madhevan, Sakkaravarthi Ramanathan and Durgesh Kumar Jha	
Hardware Implementation of DSP-Based Sensorless Vector-Controlled Induction Motor Drive	819
Rajendrasinh Jadeja, Ashish K. Yadav, Tapankumar Trivedi, Siddharthsingh K. Chauhan and Vinod Patel	
Artificial Intelligence-Based Technique for Intrusion Detection in Wireless Sensor Networks	835
Gauri Kalnoor and Jayashree Agarkhed	
Multiconstrained QoS Multicast Routing for Wireless Mesh Network Using Discrete Particle Swarm Optimization	847
R. Murugeswari and D. Devaraj	
Author Index	861



<http://www.springer.com/978-981-10-3173-1>

Artificial Intelligence and Evolutionary Computations in
Engineering Systems

Proceedings of ICAIECES 2016

Dash, S.S.; Vijayakumar, K.; Panigrahi, B.K.; Das, S.
(Eds.)

2017, XV, 863 p. 445 illus., 306 illus. in color., Softcover

ISBN: 978-981-10-3173-1