

# **2024 International Conference on Optimization Computing and Wireless Communication (ICOCWC 2024)**

**Debre Tabor, Ethiopia  
29-30 January 2024**

**Pages 1-588**



**IEEE Catalog Number: CFP24UN7-POD  
ISBN: 979-8-3503-8335-5**

**Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

**\*\*\* *This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP24UN7-POD
ISBN (Print-On-Demand):	979-8-3503-8335-5
ISBN (Online):	979-8-3503-8334-8

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## TABLE OF CONTENTS

A Study of the Home Education Community Based on Louvain's Algorithm.....	1
<i>Lijuan Li</i>	
Abnormal Analysis System and Analysis of Residential Electricity Consumption Based on Electricity Data.....	6
<i>Wende Zhuang, Wei Zhang, Hao Yuan</i>	
Analysis and Research of Industry Load Forecasting Based on Power Big Data Technology.....	10
<i>Jun Yang, Wu Wang, Wei Zhang</i>	
Analysis of Cultural Group Communication Behavior Based on Deep Belief Network Algorithm.....	14
<i>Meie Shi</i>	
Analysis of English Speech Learning Quality Based on Speech Recognition Technology.....	19
<i>He Boyi, Liu Guangliang</i>	
Analysis of Inclination Mechanism and Trajectory Prediction of Deep-Hole Small-Diameter Scientific Drilling Holes.....	23
<i>Xu Guo-Hui, Liu Hai-Sheng, Mu Yuan-Hong</i>	
Application of FFT-Based Fourier Algorithm in Microcomputer Relay Protection.....	27
<i>Guozhong Wang</i>	
Application of Video Resource Caching Method Based on Graph Neural Network Recommendation Algorithm .....	31
<i>Ziheng Li</i>	
Automatic Orchestration Algorithm of Graphic Language in Visual Communication Design.....	36
<i>Hu Wei</i>	
Automatic Voltage Control Reliability Prediction for AC/DC Hybrid Distribution Network .....	40
<i>Yushu Cui, Di Qu, Peng Wei</i>	
Corporate Financial Situation System Based on Decision Tree and SVM .....	45
<i>Xuejun Yuan, Mingqi Ye</i>	
Design and Implementation of Art Design System Based on Image Processing Technology .....	49
<i>Zirui Feng</i>	
Design and Implementation of Vulnerability Verification Framework Based on Data Mining Algorithm .....	53
<i>Qiuyang Wu, Liang Zhang, Jingxuan Xu, Run Xu</i>	
Design and Research of Intelligent Control System Based on New Artificial Intelligence Algorithm .....	57
<i>Shunru Zhang</i>	
Design of Automotive Electronically Controlled Mechanical Braking System Based on Computer Virtual Technology .....	61
<i>Chuanhai Ma</i>	
Detection and Tracking of Moving Targets in the Robocup Martial Arts Ring Video.....	65
<i>Rong Sun, Guangxin Chai</i>	

Distribution Network Reconstruction Based on Discrete Particle Swarm Algorithm Based on Quantum Coding .....	69
<i>Ning Luo, Ludong Chen, Jinsen Liu, Pengcheng Zhang, Fei Zheng</i>	
Energy Storage Optimization Technology of Source-Grid-Load-Storage Microgrid Based on Particle Swarm Algorithm .....	73
<i>Zhilu Liu, Changming Mo, Jianfeng Zheng, Longzhou Zhou, Zhongye Xian</i>	
Energy-Dependent Model Construction of Economic Growth Based on Markov Model.....	77
<i>Wang Jianmin, Yi Xiaohua</i>	
Enhanced Algorithm and Comparative Study of Sales Forecasting Model Based on Data Mining Technology .....	81
<i>Yanwu Wang</i>	
Evaluation of Evacuation Capacity of High-Speed Railway Bridges Based on Improved SPAAlgorithm .....	86
<i>Yuyang Fan</i>	
Flexible Load Collaborative Scheduling Method of Distribution Network Based on Particle Swarm Algorithm .....	90
<i>Jiayi Shang, Tianyu Zhao, Fei Li, Yamin Zheng, Haibo Lu, Zhipeng Zhang</i>	
FPGA Design of Iterative Messaging Algorithm Based on Pseudo Code Capture.....	94
<i>Shuang Leng</i>	
Improved Direct Communication Interference Suppression Technology Based on ATF Algorithm.....	98
<i>Jun Xiao, Chuanlin Yuan</i>	
Research on Electric Vehicle Charging Scheduling Based on Deep Learning Algorithm .....	104
<i>Baozhong Zhang, Yin Yuan, Jiang Xu, Hui Sun</i>	
Research on Electronic Communication Information Storage Based on Ranking Optimization Algorithm .....	110
<i>Shuang Leng</i>	
Research on Fine Water Injection Flow Field Regulation Technology of Reservoir Based on Computer Neural Network Simulation.....	114
<i>Ruijie Geng, Minglin Li, Yaqiong Wei, Mingzhu Li, Guoyong Li, Chenglin Yu</i>	
Research on Identification Method of Rural Revitalization Development Type Based on SMOTE-RF Algorithm.....	120
<i>Yanshu Ding</i>	
Research on Industrial Internet Platform Architecture Based on Machine Learning Algorithm .....	124
<i>Wang Dahai</i>	
Research on Language Online Learning System Based on Content Recommendation Algorithm .....	128
<i>Lu Qi</i>	
Research on Library Collection Resource Recommendation Algorithm Based on Deep Learning.....	132
<i>Zhendong Zhao, Yuxin Wan</i>	
Research on Micro Grid Optimization Based on Multi-Agent Reinforcement Learning Algorithm.....	137
<i>Bin Zhang, Zongchuan Zhou, Yiming Han, Zhibin Hu, Junxian Ma</i>	

Research on Monitoring the Operation Indicators of Small and Micro Enterprises Based on Electricity Consumption Data .....	141
<i>Qing Dai, Wende Zhuang, Jun Yang</i>	
Research on Music Information Retrieval Algorithm Based on Deep Learning .....	146
<i>Xiaochen Guo</i>	
Research on New Media Event Clustering Based on Network Structure and Content Distribution .....	150
<i>Li Jinhui</i>	
Research on Power Grid Multi-Project Portfolio Investment Optimization Decision Based on RWCS Search Algorithm.....	154
<i>Qiang Wen</i>	
Research on Simulation of Camouflage Intrusion Detection Model Based on Improved RF Algorithm .....	158
<i>Bo Liu, Fangfang Dang, Ying Yang, Dingding Li, Yifan Song</i>	
Research on Smart Contract Vulnerability Detection Method of Power Equipment Based on Deep Learning Algorithm .....	162
<i>Liang Zhang, Yuan Fang, Yuexin Shen, Xiyin Wang</i>	
Research on the Application of Association Rule Mining Algorithm on Large Datasets .....	166
<i>Jilin Li, Man Wang</i>	
Research on the Application of BP Algorithm of Neural Network in Teaching Quality Evaluation .....	170
<i>Zhang Nan</i>	
Research on the Application of Distributed Intrusion Detection System in Campus Network .....	174
<i>Wang Yongkang, Zhang Meixia</i>	
Research on the Application of Louvain's Algorithm in Traditional Cultural Media Communication.....	178
<i>Guizhen Cai</i>	
Research on Video Object Detection Algorithm for Intangible Cultural Heritage Based on Ant Colony Algorithm.....	183
<i>Yiou Liu, Yingfei Huang, Haimin Huang</i>	
Sapphire Color Grading Method Based on Color Space Feature Automatic Clustering Algorithm .....	188
<i>Wang Yanjuan</i>	
Secondary Water Supply UV Disinfection System Controlled Based on Intelligent Algorithm .....	192
<i>Sili Wu, Yue Yu</i>	
Simulation of Enterprise Network Marketing Situation Prediction Model with Deep Convolution Neural Network Algorithm.....	196
<i>Meiling Liu, Hongyan Fu, Yue Zou</i>	
System Design of FPGA Development Platform for Backbone Image Processing Algorithms .....	201
<i>Shuang Leng</i>	
Research on Modulation Signal Detection Method Based on Deep Learning.....	205
<i>Bowei Xing, Yin He, Chi Xu, Yong Zhang</i>	
Prediction of Reliability of Data in Underwater Communication Network Using Fuzzy Logic .....	211
<i>Surendra Yadav, Gobi N, Rakesh Kumar Yadav</i>	

The Intelligent Prediction of Evolutionary Algorithms for Automated Design of Multi-Agent Systems.....	219
<i>Ritesh Kumar, Mohit Kumar Sharma, N. R Solomon Jebaraj</i>	
IoT Based Optical Sensor Network for Precision Agriculture.....	226
<i>R S Vishnu Durai, R. Vijayakumar, S. Lakshmisridevi, Shaik Thasleem Bhanu, U. Arunkumar</i>	
Artificial Neural Network-Based Investigation of Zirconium Diboride Nanoparticles Reinforced in an Aluminium Alloy Matrix .....	233
<i>P. Marshal Raj, C Vennila, Anush Kannan N K, R. Sasikala, Harishchander Anandaram, Manjunathan Alagarsamy</i>	
Neural Network Modeling of Long-Term Cardiac Arrest Risk Forecasting.....	240
<i>M N Nachappa, Dhananjay Kumar Yadav, Surjeet Yadav</i>	
An Enhanced Performance Analysis of Evolutionary Algorithms for Automated Design of Autonomous Vehicles.....	246
<i>Pawan Bhambu, Ganesh D, Vaishali Singh</i>	
An Enhanced Optimization of Automated Detection of Cardiac Abnormalities Using Deep Learning .....	253
<i>Ananta Ojha, Dhyan Chandra Yadav, Manish Kumar Goyal</i>	
The Enhanced Analysis of FACT-Based Framework for Traffic Prediction in V2V Networks.....	259
<i>Inzimam, Mir Aadil, Ankita Agarwal</i>	
Exploiting Convolutional Neural Networks for Automated Pathology Image Classification .....	265
<i>Sunil Sharma, C Menaka, Akhilendra Pratap Singh</i>	
Investigating Hamiltonian Monte Carlo for Real-Time Network Traffic Prediction.....	272
<i>Pavan Chaudhary, Sandeep Kumar Jain, A Rengarajan</i>	
Deep Learning-Based Representation Learning for Automatic Detection of Lung Cancer on Chest CT Scans.....	279
<i>Kalyan Acharjya, Manish Srivastava, K. Suneetha</i>	
Hierarchical Representation Learning for Improved Diagnosis of Prostate Cancer on MRI Scans .....	286
<i>Prabhu A, Megha Pandeya, Harshita Kaushik</i>	
A Robust Ensemble Learning Approach for Medical Image Segmentation with Transfer Learning.....	292
<i>Ritu Shree, Kavitha R, Shweta Singh</i>	
Building End Member Hybrid Profiles from Hyper Spectral Images for Unsupervised Land Cover Mapping .....	298
<i>Rakesh Kumar Yadav, Vijay Kumar Pandey, Feon Jaison</i>	
Comparing Time Series Nearest Neighbors and Artificial Neural Networks for Hyper Spectral Image Analysis .....	304
<i>Deepak Mehta, Vaishali Singh, Neeraj Sharma</i>	
Utilizing Hybrid Time Series Clustering Algorithms for Hyper Spectral Image Processing.....	311
<i>Amandeep Gill, Rahul Pawar, Ritesh Kumar</i>	
Considering Autoregressive Integrated Moving Average Models for Hyper Spectral Image Recognition .....	318
<i>Dhananjay Kumar Yadav, Govind Shay Sharma, Bhuvana J</i>	

Analyzing the Performance of Online Adaptive Clustering for Time Series with Head-Based Aggregation.....	325
<i>Ankita Agarwal, Murli Manohar Gour, Karthikeyan M P</i>	
Examining the Use of Generative Adversarial Network for Predicting Tumor Malignancy .....	332
<i>J Bhuvana, Megha Pandeya, Deepak Kumar</i>	
Exploring Neural Networks for Time Series Classification in Communication Networks .....	338
<i>Pavan Chaudhary, Vishvendra Singh, Adlin Jebakumari S</i>	
Developing Multi-Scale Patch Representations for Low Energy Data Aggregation Using Unit Block Building Model.....	345
<i>Bhuvana J, Ritesh Kumar, Vikas Kumar Kharbas</i>	
A Novel Computer-Aided Estimation of Breast Cancer Via Time Series Analysis.....	352
<i>Pawan Bhambu, Haripriya, Dhyan Chandra Yadav</i>	
Investigating the Integrity of Irrigation Systems Through Hyper Spectral Image Analysis .....	358
<i>Zahid Ahmed, Preethi D, Dhananjay Kumar Yadav</i>	
The Smart Directional Analysis of Time Series for Early Detection in Pancreatitis Classification .....	365
<i>Ankita Agarwal, Mohit Kumar Sharma, N. R Solomon Jebaraj</i>	
The Optimized Neural Networking Scheme in Time Series Analysis for Detecting Depression .....	371
<i>Megha Pandeya, Surjeet Yadav, Murugan R</i>	
Correlating Time Series Analysis with Radiotherapy for the Early Detection of Hodkin Lymphoma .....	377
<i>M N Varun Somanna, Rakesh Kumar Yadav, Inzimam</i>	
Constructing Conditional Random Fields for Automated Land Cover Mapping from Hyper Spectral Images .....	383
<i>Sunil Sharma, Prabha S, Vaishali Singh</i>	
Assessing the Accuracy of Time Series Algorithms for Extraction of Quantitative Data from Hyper Spectral Imagery.....	389
<i>Sandeep Kumar Jain, Prabha S, Girija Shankar Sahoo</i>	
The Smart Performance Optimization of an Evolutionary Algorithm-Based Framework for Automated Design of Adaptive Systems .....	396
<i>Manivasagam, Gaurav Shukla, Davendra Kumar Doda</i>	
Maximizing the Accuracy of Time Series Analysis for the Early Detection of Rhabdomyosarcomas .....	403
<i>Ritu Shree, Prabhu A, Anupam Kumar Gautam</i>	
Utilizing Convolutional Neural Networks for Real-Time Object Tracking.....	409
<i>Dhananjay Kumar Yadav, Neeraj Sharma, Febin Prakash</i>	
The Smart Intuitive Natural Language Understanding with Recurrent Neural Networks .....	417
<i>R Raghavendra, Megha Pandeya, Deepak Kumar</i>	
Integrating Entropy-Based Classification into Hyper Spectral Images for Improved Object Identification .....	424
<i>Vishvendra Singh, Rahul Pawar, Pavan Chaudhary</i>	
Investigating and Implementing the Efficiency of Image Restoration Techniques in Digital Image Processing.....	431
<i>Jyoti Seth, Ananta Ojha, Vaishali Singh</i>	

Automated Static Analysis with Bayesian Inference for Interference Mitigation in 5G Cloud Networks .....	438
<i>Shiv Shankar Shankar, Deepak Mehta, Vaishali Singh</i>	
Assessing Deep Learning Approaches for Time Series Analysis to Detect Uterine Sarcoma .....	444
<i>Gaurav Shukla, Meenakshi Dheer, Ramkumar Krishnamoorthy</i>	
Real-Time Anomaly Detection with Generative Adversarial Networks for Network Security Management .....	450
<i>Rakesh Kumar Yadav, Swati Gupta, Preethi D</i>	
Unsupervised Classification of Hyper Spectral Images Using Feature Extraction and Fuzzy Logic .....	456
<i>A Kannagi, Chetan Chaudhary, Jyoti Seth</i>	
Investigating the Use of Deep Learning Networks to Classify Cardiovascular Diseases.....	462
<i>Karthikeyan M P, Pavan Chaudhary, Meenakshi Dheer</i>	
The Smart Attitude Analysis of Network Interference User Using Recursive Neural Framework.....	468
<i>Ankita Agarwal, Rekha Devrani, A Kannagi</i>	
Utilizing Deep Learning in Pre-Clinical and Clinical Diagnosis of Peripheral Neuropathies.....	473
<i>Akhilendra Pratap Singh, Vikas Kumar Kharbas, Prerna Mahajan</i>	
The Secured Optimization to Enhance the Maximum Target Audience in Online Advertising Using Deep Belief Networks .....	478
<i>Thiruvenkadam T, Akhilendra Pratap Singh, Aakriti Chauhan</i>	
Multivariate Statistical Analysis on Hyper Spectral Satellite Images for Land Cover Mapping.....	484
<i>Meenakshi Dheer, Adlin Jebakumari S, Shweta Singh</i>	
An Innovation of Exploiting Generative Adversarial Networks to Augment Virtual Reality Experiences .....	490
<i>Rishi Sikka, Vineet Saxena, M N Nachappa</i>	
Analyzing Feature Selection and Dimensionality Reduction for Big Data .....	497
<i>Ashish Bishnoi, Feon Jaison, Durgesh Wadhwa</i>	
Autoregressive Integrated Moving Average Model for Time Series Analysis.....	504
<i>Dinesh Kumar Yadav, Soumya K, Laxmi Goswami</i>	
Automated Detection of Cardiac Abnormalities Using Convolutional Neural Networks .....	510
<i>Gobi N, Rishi Sikka, Sunil Kumar</i>	
A Discussion of the Potential for Bootstrap Weighted-ERA for Low-Energy Data Aggregation.....	516
<i>Laxmi Goswami, Ashish Bishnoi, A Kannagi</i>	
Application of Convolutional Neural Networks for Automated Land Cover Mapping Using Hyper Spectral Imagery.....	522
<i>Ananta Ojha, Rajesh Guputa, Gulista Khan</i>	
Performing Hybrid Predictions of Time Series in Head Based Aggregation Clusters.....	527
<i>Rahul Vishnoi, J Bhuvana, Monika Abrol</i>	
Exploiting Semantic Context for Anomaly Detection in Medical Images.....	533
<i>Anubhav Sony, Umesh Kumar Singh, A Kannagi</i>	

Assessing Optimal Hyper Parameters of Deep Neural Networks on Cancers Datasets .....	539
<i>Pankaj Kumar Goswami, A Kannagi, Anubhav Sony</i>	
Leveraging Self-Supervised Transfer Learning for Robust Medical Image Classification .....	545
<i>Surendra Yadav, Rakesh Kumar Dwivedi, Gobi N</i>	
An Overview of Clustering Algorithms for Credit Card Fraud Detection.....	551
<i>N. R Solomon Jebaraj, Jyoti Shekhawat, Rupal Gupta</i>	
Investigating the Use of Spatial Transformer Networks and Recurrent Neural Networks for Medical Image Segmentation .....	557
<i>Vineet Saxena, M N Nachappa, Ritu Shree</i>	
Enhancing Automated Industrial Guiding Through Computer Vision-Based Detection of Centerlines and Patterns .....	564
<i>Neeraj Kumari, Ananta Ojha, Manish Kumar Goyal</i>	
Investigating Network and System Performance with Molecular Communication in Network Coding for Wireless Applications.....	569
<i>A Rengarajan, Sandeep Kumar Jain, Ajay Rastogi</i>	
Automated Classification of Brain Tumors Using Convolutional Neural Networks.....	576
<i>Namit Gupta, Taskeen Zaidi, Pramod Kumar Faujdar</i>	
Assessing the Feasibility of Integrated Communications Software Design for Networks .....	582
<i>Davendra Kumar Doda, Prashant Kumar, M. S. Nidhya</i>	
Developing Support Vector Machines for Accurate Medical Image Analysis.....	589
<i>Feon Jaison, Vijay Kumar Pandey, Ashish Bishnoi</i>	
Exploring the Use of Advanced Imaging Diagnostics: Deep Learning for 3D-MRI Analysis .....	596
<i>Baldev Singh, Kul Bhushan Anand, Rahul Pawar</i>	
Exploring Spatio-Temporal Context with Recurrent Neural Networks for Medical Image Analysis.....	603
<i>Bhuvana J, Vaibhav Srivastav, Sunil Kumar</i>	
Designing Solutions for High-Performance Communications Software Design in Network Applications.....	610
<i>Puneet Agarwal, Bhuvana J, Bhuvnesh Sharma</i>	
Modeling and Optimization of Video Transmission in Data Compression & Source Coding.....	616
<i>Satendra Singh, Shri Bhagwan, C Menaka</i>	
Improving Medical Image Synthesis Using Generative Adversarial Networks .....	622
<i>Soumya K, Sunil Kumar Jakhar, Dinesh Kumar Yadav</i>	
Real-Time Motion Detection for Cargo Tracking and Management in Industrial Warehouses.....	629
<i>Neetha S S, Vijay Kumar Pandey, Amit Kumar Sharma</i>	
Cross-Layer Architectures for Enhancing Application-Specific Network Performance .....	635
<i>Ajay Kumar Upadhyay, Sanjeev Kumar Mandal, Vishal Sharma</i>	
Assessing the Performance of Autonomous and Adaptive Communications Systems in Wireless Sensor Networks.....	642
<i>Kunal Sharma, Sunil Kumar Gaur, Haripriya</i>	

Industrial Systems Optimization from Combining Internet of Things and Cloud Computing .....	648
<i>M N Nachappa, Pramod Kumar Faujdar, Parag Agarwal</i>	
Automated Detection of Abnormalities in Ultrasound Images Using Deep Learning.....	655
<i>Amit Kumar, Bhuvana J, Vikas Kumar Kharbas</i>	
Understanding Social Networks Using Machine Learning Sentimental Analysis Algorithms .....	661
<i>Garima Goswami, M N Varun Somanna, Inzimam</i>	
Performance Assessment of Multimode Network Designs for Improved Electromagnetic Compatibility.....	667
<i>Sandeep Kumar Jain, Sri Prakash Pandey, S Prabha</i>	
Capacity Evaluation of Network Coding for Wireless Systems in Heterogeneous Wireless Networks .....	674
<i>Sanjeev Kumar Mandal, Pramod Kumar Faujdar, Aaditya Jain</i>	
Understanding the Limitations of Authentication Protocols Employed by Existing Information Security Models for Networked Applications .....	681
<i>Ritu Shree, Vivek Kumar, Prabh A</i>	
Examining Trusted Communication in Networked Systems Through Cryptographic Security Algorithms.....	688
<i>Vijay Kumar Pandey, Nikita Jain, R Raghavendra</i>	
An Evaluation of Arithmetic and Huffman Coding in Data Compression & Source Coding.....	696
<i>Febin Prakash, Vaishali Singh, Ashendra Kumar Saxena</i>	
An Investigation of the Use of Applied Cryptography for Preventing Unauthorized Access.....	702
<i>Rajendra P. Pandey, Rahul Pawar, Girija Shankar Sahoo</i>	
Adversarial Transfer Learning for Automated Segmentation of Brain Tumors.....	708
<i>Kalyan Acharjya, Vineet Saxena, R Kamalraj</i>	
Implementing Information Security Models to Reduce Cyber Security Risks in Networked Applications.....	714
<i>Ajay Rastogi, R Raghavendra, Megha Pandeya</i>	
An Exploration of Data Augmentation Techniques in Ensemble Learning for Medical Image Segmentation with Transfer Learning .....	720
<i>Swati Singh, Namit Gupta, Febin Prakash</i>	
Discovering Patterns with Neural Networks in Agricultural Crop Monitoring .....	727
<i>Akhilendra Pratap Singh, Neeraj Kaushik, Rahul Pawar</i>	
Investigating Novel Approaches to Interactive Communication Media Algorithms for Networking Applications.....	733
<i>Haripriya, Neeraj Das, Prashant Kumar</i>	
Semi-Supervised Adversarial Transfer Learning for Automated Skin Lesion Segmentation .....	740
<i>Ashish Bishnoi, A Kannagi, Kalyan Acharjya</i>	
Analyzing the Performance of Different Compactor Techniques in Data Compression & Source Coding .....	746
<i>Ankit Varshney, K. Suneetha, Dhananjay Kumar Yadav</i>	
Exploring Sentiment Analysis Algorithms in Power Generation for Automated Monitoring .....	752
<i>Ankita Agarwal, Arun Kumar Pipersenia, Taskeen Zaidi</i>	

Deep Learning-Based Automated Detection of Retinal Diseases with Convolutional Neural Networks .....	759
<i>Manivasagam, Shweta Singh, Shri Bhagwan</i>	
Object-Based Image Analysis of Hyper Spectral Imagery Using Semantic Segmentation Techniques .....	765
<i>Amit Kumar Sharma, Manju Bargavi, Akhilendra Pratap Singh</i>	
Automating Medical Image Segmentation with Recurrent Neural Networks .....	772
<i>Neeraj Das, Ajay Kumar Upadhyay, Deepak Mehta</i>	
The Performance Enhancement of Maximized Connectivity Range in Agriculture Through IoT .....	778
<i>Ramkumar Krishnamoorthy, Trapti Agarwal, Sunil Kumar</i>	
Investigating the Effect of Transfer Learning on Medical Image Segmentation Performance.....	786
<i>Parag Agarwal, M. S. Nidhya, Trapti Agarwal</i>	
Understanding Time Series Analysis for Improved Forecasting Techniques .....	793
<i>Umesh Kumar Singh, A Kannagi, Meenu Shukla</i>	
Generating Synthetic Text Using Generative Adversarial Networks.....	800
<i>Nisha Sahal, Ramkumar Krishnamoorthy, Navjot Singh</i>	
Adversarial Transfer Learning for Left Ventricle Segmentation in Cardiac CT Images.....	807
<i>Intekhab Alam, Ramesh Chandra Tripathi, R Ragavendra</i>	
Reinforcement Learning to Manage Energy Efficient Supply Chains.....	813
<i>A Kannagi, Savita, Pankaj Kumar Goswami</i>	
The Smart Improving of Translation Models Using Recurrent Neural Networks .....	819
<i>Anjali Singh, Mayur Agarwal, Gowrishankar J</i>	
Assessing Independent Component Transformations for Improved Object Recognition in Hyper Spectral.....	825
<i>R Kamalraj, Meenu Shukla, Nikita Jain</i>	
Enhancing Efficiency in Livestock Monitoring and Management with IoT Solutions ' .....	832
<i>Girija Shankar Sahoo, Rekha Devrani, Mir Aadil</i>	
Development of Authentication Framework Using GAIT for IoT Communication Models.....	839
<i>Humaira Nishat, T. S. Balaji, S. Shargunam, R. Sasikala, K Rani</i>	
Development of Modified Homomorphic Encryption for IIoT on Textual Data.....	846
<i>P. Rathinakumar, R. Dhivya, S. Prasath, K N Jayapriya, M. Sathish Kumar</i>	
An Early Detection of West Nile Virus Using High Dense Time Series Analysis Framework .....	852
<i>Taskeen Zaidi, Preeti Naval, Pramod Kumar Faujdar</i>	
Automating Optimal Healthcare Delivery Through Hyper Spectral Imaging in Sustainable Medical Environments.....	858
<i>Jyoti Seth, Kavitha R, Dhyan Chandra Yadav</i>	
Optimizing Fuzzy System of Fuzzy Time Series for Hyper Spectral Image Classification .....	867
<i>M. S. Nidhya, Preeti Naval, Ravindra Kumar</i>	
Spectral Signature Analysis of Land Sat TM Images for Improved Hyper Spectral Image Analysis.....	874
<i>Abhinav, Adlin Jebakumari S, Shweta Singh</i>	

An Innovative Structural V AR Analysis for Network Congestion Monitoring .....	880
<i>Deepak Kumar, C Menaka, Neeraj Das</i>	
A Novel Nearest Neighbor Algorithm to Low Energy Data Aggregation in Sensor Networks .....	887
<i>S Adlin Jebakumari, Kalyan Acharjya, Aakriti Chauhan</i>	
Exploring Autoregressive Moving Average Models in Wireless Sensor Network Time Series Analysis .....	894
<i>Swati Gupta, Gobi N, Vaishali Singh</i>	
Analyzing the Role of Time Series Analysis in Early Detection of Merkel Cell Carcinoma .....	900
<i>Akhilendra Pratap Singh, Jyoti Seth, M N Nachappa</i>	
Automating Object Identification from Hyper Spectral Data with Markov Random Fields .....	906
<i>Chetan Chaudhary, Rekha Devrani, Mir Aadil</i>	
Understanding the Dynamics of Sparse Coding in Auto-Encoders for Cancer Detection .....	913
<i>Thiruvenkadam T, Kalyan Acharjya, Manish Kumar Goyal</i>	
The Enhanced Performance Optimization of Combining Online and Offline Data for Integrated Big Data Analytics .....	919
<i>N. R Solomon Jebaraj, Chetan Chaudhary, Amandeep Gill</i>	
Deep-X: Automated Diagnosis of Respiratory Sounds Using Deep Learning .....	926
<i>Swati Singh, Aakriti Chauhan, Ganesh D</i>	
The Smart Predictive Analysis of Stock Market Performance Using Restricted Boltzmann Machines .....	933
<i>Rekha Devrani, Prerna Mahajan, Dinesh Kumar</i>	
Improving Efficiency and Accuracy in Clinical Diagnostic Decision Making with Deep Learning .....	939
<i>Vikas Kumar Kharbas, N Gobi, Dinesh Kumar</i>	
Automated Detection of Cloud and Other Land Features Using Hyper Spectral Images .....	945
<i>Swati Singh, Shiv Shankar Shankar, Thiruvenkadam T</i>	
Enhancing Personalization and Privacy Management with Support Vector Machines in High Dense Cloud Networks .....	950
<i>Ramkumar Krishnamoorthy, Swati Singh, Swati Gupta</i>	
An Innovative Machine Learning Approach in Diagnostic Imaging Using Deep Learning .....	956
<i>Deeplata Sharma, R Raghavendra, Dhananjay Kumar Yadav</i>	
Understanding Time Series Analysis in Early Detection of Unclassified Endocrine Tumors .....	962
<i>Jyoti Seth, Febin Prakash, Vaishali Singh</i>	
An Innovation Object Detection to Improve the Accuracy Using Adversarial Networks .....	968
<i>M N Nachappa, Chetan Chaudhary, Shiv Shankar Sharma</i>	
The Smart Optimization of Scalable Probabilistic Modeling with Gaussian Processes .....	973
<i>N Gobi, Aishwary Awasthi, Rakesh Kumar Dwivedi</i>	
Automated Multimodal Medical Diagnostics Using Deep Learning Frameworks .....	980
<i>Rajendra P. Pandey, A Rengarajan, Aishwary Awasthi</i>	
Leveraging Adaptive Hyper Parameter Tuning for Automated Machine Learning .....	987
<i>M. S. Nidhya, Nidhi Saraswat, Prashant Kumar</i>	

Exploring Feature Extraction for Image Segmentation Methods in Critical Tumor Detection .....	994
<i>Ramakant Upadhyay, Shreshta Bandhu Rastogi, Deepak Mehta</i>	
Analyzing Multilayer Perception Architectures for Reinforcement Learning .....	1000
<i>Ramakant Upadhyay, Arun Kumar Pipersenia, M. S. Nidhya</i>	
Evaluating the Enhanced Performance of Tree-Based Models for Natural Language Understanding .....	1007
<i>Adlin Jebakumari S, Aasheesh Raizada, Rahul Vishnoi</i>	
Exploring the Use of Long Short-Term Memory for Time Series Analysis .....	1013
<i>Amit Kumar Sharma, Neetha S S, Aishwary Awasthi</i>	
Multi-Scale Recurrent Neural Networks for Medical Image Classification.....	1019
<i>Parag Agarwal, M N Nachappa, Chandra Kant Gautam</i>	
Recurrent Neural Networks for Improved Medical Image Classification .....	1025
<i>Umesh Kumar Singh, Kavitha R, Pankaj Saraswat</i>	
Applying Fuzzy Logic for Constructing Self-Organized Underwater Communication Networks.....	1031
<i>Chandra Kant Gautam, Amit Kumar, Bhuvana J</i>	
Convolutional Recurrent Neural Networks for Medical Image Recognition .....	1039
<i>Pankaj Saraswat, Rohaila Naaz, Kavitha R</i>	
An Innovation Analysis of Semantic Text Classification Using Deep Belief Networks .....	1045
<i>Shashank Mishra, N. R Solomon Jebaraj, Pankaj Saraswat</i>	
Deployment Strategies for Wireless Sensor Networks Using Math Modeling Techniques.....	1053
<i>Nisha Sahal, Murugan R, Aasheesh Raizada</i>	
Real-Time Semantic Segmentation of Medical Images Using Convolutional Neural Networks .....	1060
<i>Aishwary Awasthi, Ramesh Chandra Tripathi, T Thiruvenkadam</i>	
The Smart Predictive Network Maintenance Model Using AI/ML Time Series Analysis in Cloud Networks .....	1067
<i>Prabha S., Ramakant Upadhyay, Pankaj Kumar Goswami</i>	
Deep Learning for Medical Image Segmentation Using Convolutional Neural Networks .....	1074
<i>Prabha S, Sachin Gupta, Sri Prakash Pandey</i>	
Wavelet Transformation Algorithm for Low Energy Data Aggregation.....	1080
<i>Gaurav Kumar Rajput, Murugan R, Rajneesh Kumar Tyagi</i>	
The Smart Early Detection of Addison's Disease Using Time Series Analysis .....	1087
<i>Nidhi Saraswat, Mayur Agarwal, Syed Harron</i>	
Exploring Dynamic Time Warping for Network Traffic Analysis.....	1093
<i>R Raghavendra, Chandra Kant Gautam, Nikita Jain</i>	
Utilizing Time Series Analysis to Discern Smallpox Infection .....	1099
<i>Ashendra Kumar Saxena, Febin Prakash, Aishwary Awasthi</i>	
Automating Weed Detection Through Hyper Spectral Image Analysis.....	1105
<i>Shambhu Bharadwaj, Prabhu A, Vipin Solanki</i>	
Deriving a Power-Law Model for Aggregating Data with Head Based Clustering.....	1110
<i>Vipin Solanki, Ajay Rastogi, R Raghavendra</i>	

Low-Energy Data Aggregation Via Autoregressive Modeling of Time Series .....	1117
<i>Sachin Goswami, Manish Joshi, Ananya Saha</i>	
Efficient Image Registration Using Support Vector Machines .....	1123
<i>Sachin Goswami, Anu Sharma, Prerna Mahajan</i>	
Applying Machine Learning Techniques to Time Series Analysis for Early Detection of Thymoma .....	1129
<i>M N Nachappa, Sachin Goswami, Shreshta Bandhu Rastogi</i>	
Leveraging Transfer Learning for Improved Medical Image Classification .....	1135
<i>Durgesh Wadhwa, Sunil Kumar, A Rengarajan</i>	
Differentiating Cluster Heads on Data Aggregating Time Series Forecasting.....	1142
<i>Durgesh Wadhwa, Amit Kumar Sharma, Manju Bargavi</i>	
Adaptive Clustering Algorithm Applied Towards Robust Image Segmentation of Hyper Spectral Scans.....	1148
<i>Murugan R, Madhav Solanki, Arun Gupta</i>	
Improving Machine Learning Techniques for Personalized Cardiac Arrest Risk Estimation.....	1153
<i>Prerna Mahajan, Durgesh Wadhwa, Amit Kumar</i>	
Enhancing Medical Image Segmentation Performance with Transfer Learning .....	1158
<i>Gobi N, Rakhi Gupta, Rohaila Naaz</i>	
Enhancing Medical Image Segmentation Through Knowledge Transfer .....	1165
<i>R Raghavendra, Monika Abrol, Ramesh Chandra Tripathi</i>	
Feature Extraction Using Canonical Correlation Analysis for Improved Recognition of Objects in Hyper Spectral Data .....	1172
<i>Febin Prakash, Sachin Gupta, Garima Goswami</i>	
Fuzzy Optics Enabled Antenna Model for Push-To-Talk Communication in Underwater Networks .....	1178
<i>Prakash Pandey, Prerna Mahajan, Aasheesh Raizada</i>	
Time Series Analysis for Low Energy Data Aggregation Using Extended Kalman Filtering .....	1185
<i>Rakhi Gupta, Gaurav Kumar Rajput, M N Nachappa</i>	
Evaluating Wavelet Analysis in the Estimation of Network Congestion with Time Series Analysis .....	1190
<i>Adlin Jebakumari S, Sachin Gupta, Mayur Agarwal</i>	
Accurate Diagnosis by Magnetic Resonance Imaging Using Deep Learning .....	1197
<i>A Rengarajan, Zahid Ahmed, Rajendra P. Pandey</i>	
Exploring the Enhanced Performance of Unsupervised Feature Learning and Compression with Auto Encoders .....	1204
<i>Swati Gupta, Karthikeyan M P, Neeraj Das</i>	
A Support Vector Machine Based Approach for Accuracy Enhancement in End Member Estimation from Hyper Spectral Images.....	1210
<i>Sunil Kumar, Bhuvana J, Rakhi Gupta</i>	
Investigating Support Vector Machines for Time Series Predictions in Wireless Networks .....	1217
<i>Haripriya, Ajay Agrawal, Pavan Kumar Singh</i>	

A Novel Intelligent Network Forensics Enabled by AI/ML Algorithms and Time Series Analysis in Edge Computing.....	1225
<i>D Preethi, Ratish Sharma, Vishnu Prasad Shrivastava</i>	
Exploring the Potential of Recurrent Neural Networks for Medical Image Segmentation.....	1232
<i>Aaditya Jain, Sanjeev Kumar Mandal, Monika Abrol</i>	
The Improved Automotive Network Optimization Scheme Through Time Series Analysis Using AI/ML.....	1238
<i>Poonam Gupta, Diptonil Banerjee, Manivasagam</i>	
Examining Low-Energy Data Aggregation with Linear Predictive Coding .....	1245
<i>Prabhu A, Sheryl Gupta, Vivek Kumar</i>	
Development of Automated Techniques for Object-Oriented Image Analysis in Hyper Spectral Images .....	1251
<i>Monika Abrol, Rajendra P. Pandey, Rahul Pawar</i>	
Advancing Support Vector Machines for Automated Medical Image Diagnosis .....	1258
<i>Ajay Agrawal, Rupal Gupta, N. R Solomon Jebaraj</i>	
Using Hyper Spectral Imaging to Optimize Treatment Protocols in Sustainable Medical Settings .....	1265
<i>R Kamalraj, Sheryl Gupta, Vineet Saxena</i>	
Performance Comparison of Generative Adversarial Networks and Neural Networks on Cancers Detection .....	1271
<i>Amit Kumar Bishnoi, Manivasagam, Rakhi Gupta</i>	
Assessing the Impact of Different Types of Regularization Techniques in Deep Learning Networks for Cancer Detection.....	1277
<i>Rahul Pawar, Ratish Sharma, Neeraj Kaushik</i>	
Automated Image Registration Using Deep Learning.....	1283
<i>Pradeep Kumar Verma, Ganesh D, Vijay Saxena</i>	
Analyzing the Role of Time Series Analysis in Early Diagnosis of Papillary Thyroid Carcinoma.....	1289
<i>Kul Bhushan Anand, Mir Aadil, Sheryl Gupta</i>	
Examining Time Series Analysis for Early Detection of Squamous Cell Carcinoma of the Head and Neck .....	1295
<i>Pradeep Kumar Shah, Deepak Mehta, Anubhav Sony</i>	
Exploring Non-Linear Dimensionality Reduction Methodology for Enhanced Target Identification from Hyper Spectral Data.....	1300
<i>Poonam Gupta, Ankit Varshney, K. Suneetha</i>	
Self-Supervised Representation Learning for Diagnosis of Cardiac Abnormalities on Echocardiograms .....	1306
<i>Ramkumar Krishnamoorthy, Ajay Agrawal, Puneet Agarwal</i>	
Generative Adversarial Networks for Synthesizing High-Quality Medical Images.....	1313
<i>Shri Bhagwan, Manivasagam, Anubhav Sony</i>	
Transferring the Modeling Capabilities of Hyper Spectral Image Analysis to Agricultural Automation.....	1319
<i>Deepak Mehta, Poonam Gupta, Ajay Kumar Upadhyay</i>	

Assessing Risk Factors with Generative Adversarial Networks for Cardiac Arrest Detection.....	1326
<i>Sunil Kumar Gaur, Preethi D, Monika Abrol</i>	
Assessing the Usefulness of Hyper Spectral Imaging for Decoding Disease Pathways in Sustainable Medical Environments.....	1332
<i>Sheryl Gupta, Parag Agarwal, M. S. Nidhya</i>	
Validating the Quality of Plant Samples Using Hyper Spectral Image Analysis.....	1339
<i>Pavan Kumar Singh, Thiruvenkadam T, Poonam Gupta</i>	
Generative Adversarial Networks for Generating Synthetic Medical Images .....	1346
<i>Sunil Kumar, Ramkumar Krishnamoorthy, Rajesh Guputa</i>	
Classifying Clinically Important Cancers Using Deep Belief Networks.....	1352
<i>Nikita Jain, R Kamalraj, Ajay Agrawal</i>	
Enhancing Medical Image Segmentation with Attention-Based Recurrent Neural Networks .....	1358
<i>Rakesh Kumar Dwivedi, Ananya Saha, Meenakshi Sharma</i>	
Enhancing Medical Imaging Diagnosis with Generative Adversarial Network .....	1364
<i>Vivek Kumar, Soumya K, Rajesh Guputa</i>	
The Performance Analysis of Non-Stationary Time Series Analysis for Low Energy Data Aggregation.....	1371
<i>Ajay Agrawal, Nisha Sahal, Ramkumar Krishnamoorthy</i>	
Bayesian Time Series Analysis for Model Updating and Parameter Estimation .....	1377
<i>Anu Sharma, Manju Bargavi, Bhawna Saraswat</i>	
Deep Transfer Learning for Automated Breast Cancer Screening.....	1383
<i>Poonam Gupta, Aaditya Jain, Thiruvenkadam T</i>	
Comparing ARMA and ARIMA for Modeling Time Series in Wireless Communications .....	1389
<i>Rajesh Guputa, Shashank Mishra, Karthikeyan M P</i>	
A Smart of Classification and Regression Tree Algorithms for Detection of Land Cover from Hyper Spectral Data .....	1396
<i>Chetan Chaudhary, Shiv Shankar Shankar, C Menaka</i>	
Robust Image Registration Using Deep Reinforcement Learning.....	1403
<i>Murugan R, Manish Srivastava, Gaurav Kumar Rajput</i>	
Comparing Boosting and Bagging Algorithms for Image Classification .....	1410
<i>Chetan Chaudhary, Arun Gupta, R Murugan</i>	
Utilizing Machine Learning for Identification of Financial Fraud in the Healthcare Sector .....	1417
<i>Ruchika Malhotra, Vaibhavi Rajesh Mishra</i>	
An Investigation into the Impact of Using Automated Synthesisable Internal Power-Gating on Improved Power Efficiency for ASICs.....	1424
<i>Davendra Kumar Doda, M. S. Nidhya, Kalyan Acharjya</i>	
An Overview of the Use of Machine Learning Techniques for the Design Optimization of Antenna Systems.....	1429
<i>Ritesh Kumar, Manish Srivastava, Murugan R</i>	

Design and Fabrication of High Sensitivity MEMS Pressure Sensors for Aerospace Applications .....	1435
<i>Dhyan Chandra Yadav, Pramod Kumar Faujdar, Sanjeev Kumar Mandal</i>	
Optimized Sensor Network Design for Real-Time Environmental Monitoring .....	1440
<i>Syed Harron, Gaurav Shukla, Harshita Kaushik</i>	
Presentation Analysis of Reasoning Radio-Based Routing Protocols in Wireless Mesh Networks .....	1446
<i>Ritesh Kumar, Vikas Kumar Kharbas, Deepak Mehta</i>	
Evolution of Mobile Computing: From Text-Based to Visual-Based Interactions .....	1451
<i>Akhilendra Pratap Singh, Deeplata Sharma, Soumya K</i>	
Exploration of the Impact of 5G on Mobile Communication Systems.....	1457
<i>Akhilendra Pratap Singh, Jyoti Seth, R Kamalraj</i>	
Enhanced Signal-To-Noise Ratio Performance in Long-Haul Optical Communication Systems Using Advanced Forward Error Correction Techniques.....	1463
<i>Rishi Sikka, Neeraj Kumari, Ananta Ojha</i>	
Entropy-Based Analysis of Data Compression Techniques for Information Efficiency.....	1469
<i>Bhuvana J, Chandra Kant Gautam, Amit Kumar Bishnoi</i>	
A New Framework for Resource Allocation in Wireless Sensor Networks Using Machine Learning Techniques.....	1475
<i>Ratish Sharma, Namit Gupta, Taskeen Zaidi</i>	
Application of Machine Learning to Extraction of Digital Forensics Evidence.....	1481
<i>Aishwary Awasthi, Gulista Khan, Manju Bargavi</i>	
Analyzing the Current Architecture of Mobile Social Networks.....	1487
<i>Haripriya, Sachin Gupta, Sunil Kumar Gaur</i>	
Exploring the Use of Particle Swarm Optimization Algorithms to Enhance Evolutionary Computing.....	1493
<i>Syed Harron, Vijay Saxena, Neeraj Kumari</i>	
Enhancing Network Security with Blockchain Technology .....	1499
<i>Inzimam, Amit Kumar Bishnoi, C Menaka</i>	
Millimeter Wave Beamforming for Massive MIMO in 6G Communication Systems .....	1504
<i>Ritu Shree, Pradeep Kumar Verma, Kavitha R</i>	
Exploring the Integration of Blockchain in 6G Networks for Improved Security and Efficiency.....	1510
<i>Manju Bargavi, Atul Dadhich, Anu Sharma</i>	
Identifying and Addressing Security Vulnerabilities in Hybrid Network Security Algorithms .....	1516
<i>Arun Kumar Pipersenia, M. S. Nidhya, Sandeep Kumar Jain</i>	
Exploring the Impact of LSTM Parameters on Network Performance for Automatic Text Summarization.....	1522
<i>Rohaila Naaz, Kavitha R, Surendra Yadav</i>	
Efficient Convergence Analysis of Stochastic Gradient Descent for Large-Scale Optimization.....	1527
<i>Ananya Saha, Rakesh Kumar Yadav, Rakesh Kumar Dwivedi</i>	
Deep Learning Using Convolutional Neural Nets for Image Classification.....	1532
<i>Rupal Gupta, N. R Solomon Jebaraj, Ritesh Kumar</i>	

Advances in Convolutional Neural Networks for Object Detection and Recognition .....	1537
<i>Dhananjay Kumar Yadav, Neeraj Kumari, Syed Harron</i>	
A Comprehensive Study on Mechanism Knowledge Techniques for Intrusion Detection in Network Security.....	1543
<i>Manivasagam, Ankita Agarwal, Amit Kumar Bishnoi</i>	
Design and Violation Analysis of Bilateral Complementary Switches in Analog and Digital Circuits.....	1548
<i>Manish Joshi, Ananya Saha, Shweta Singh</i>	
Broadband Microstrip Antenna Design for Wireless Communications.....	1553
<i>Anu Sharma, Prerna Mahajan, Dhyani Chandra Yadav</i>	
Analyzing Frequency Dependence of Microwave Circuits and Their Impact in Higher End Wireless Networks .....	1558
<i>Rakesh Kumar Yadav, Shreshta Bandhu Rastogi, M N Nachappa</i>	
The Impact of Nanotechnology on Modern Microelectronics.....	1563
<i>Narmadha T, Girija Shankar Sahoo, Kul Bhushan Anand</i>	
Application of Permanent Magnet Synchronous Motors in Electric Drive Systems.....	1569
<i>Deepak Mehta, Ritesh Kumar, Pradeep Kumar Shah</i>	
Optimization of Automated Driving Systems for Electric Vehicles .....	1574
<i>Sunil Kumar, A Rengarajan, Kalyan Acharjya</i>	
Emerging Battery Technologies for High-Power Electric Vehicles.....	1580
<i>Bhuvana J, Megha Pandeya, Rahul Vishnoi</i>	
Reducing Power Dissipation Through Operational Amplifier Design for Low Power Applications .....	1586
<i>Preethi D, Trapti Agarwal, Sunil Kumar Gaur</i>	
Reliable Fault Tolerance and Recovery for VLSI Systems .....	1592
<i>Meenu Shukla, Amit Kumar, Prerna Mahajan</i>	
Modeling the Effects of Intraband Crosstalk on Filter Performance .....	1598
<i>Prerna Mahajan, Savita, Sri Prakash Pandey</i>	
Comparing the Performance of the Latest Generation Multi-Threaded and Multi-Core ASICs .....	1603
<i>Soumya K, Navjot Singh, Vivek Kumar</i>	
PV Generation Monitoring Using Calculated Power Flow from $\mu$ PMUS.....	1609
<i>K Hussain, S. Kaliappan, Arul Joseph Amalraj. M, Parvesh Saini, S. K. Nandha Kumar, Joshuva Arockia Dhanraj</i>	
Application of Bayesian Neural Networks for Indoor Temperature Time Series Forecasting.....	1613
<i>Ponnarasi N, Dvssv Prasad, A. Jyothi Babu, N. Revathi, Ashok Kumar, N. Alangudi Balaji</i>	
Digital Control Over Analog Active Filters - Design and Performance .....	1618
<i>C Menaka, Rakesh Kumar Yadav, Meenakshi Dheer</i>	
Design of a Compact Multiband Planar Printed Monopole Antenna.....	1623
<i>Ananya Saha, Rakesh Kumar Yadav, Abhinav</i>	
Modeling Permanent Magnet Electric Drives with Fuzzy Logic Control .....	1628
<i>Sunita Bishnoi, Ramkumar Krishnamoorthy, Akhilendra Pratap Singh</i>	

Automated Strategies for Improving Power Efficiency in Low Power Electronics .....	1634
<i>C Menaka, Aishwary Awasthi, Shambhu Bharadwaj</i>	
Responsive Tuning Strategies for VLSI Test and Diagnosis .....	1640
<i>Manish Joshi, K. Suneetha, Nidhi Saraswat</i>	
Analysis of Tunable Linear Circuit Design Methodologies for Filters.....	1645
<i>Kavitha R, Anubhav Sony, Pradeep Kumar Shah</i>	
Exploring the Behavior of Soft-Error Rate Reduction Algorithms in Digital Circuits.....	1651
<i>C Menaka, Nidhi Saraswat, Shri Bhagwan</i>	
Enabling Adaptable Mixed-Signal Circuits Using Advanced Packaging Techniques .....	1656
<i>Ramakant Upadhyay, Ajay Kumar Upadhyay, Sanjeev Kumar Mandal</i>	
Study of Adaptive Nonlinear Signal Processing Structures for Underwater Acoustic Systems .....	1662
<i>Neeraj Kaushik, A Prabhu, Harshita Kaushik</i>	
Exploring Low Voltage and Low Power Techniques for High Performance ASIC Design.....	1667
<i>Ganesh D, Chetan Chaudhary, Pradeep Kumar Verma</i>	
Microarchitecturally Exploring Fault-Tolerance and Timing on Silicon on Chip .....	1672
<i>Vaishali Singh, Gulista Khan, Ananta Ojha</i>	
Linear Optimization Algorithms for the Design of Broadband Antennas.....	1677
<i>Shashank Mishra, Karthikeyan M P, Navjot Singh</i>	
Smart Sensor Fusion for Reliable Autonomous Navigation in Challenging Environments .....	1683
<i>Intekhab Alam, Garima Goswami, Febin Prakash</i>	
Optimizing Cross-Layer Design for Multi-Hop Wireless Networks .....	1688
<i>Manju Bargavi, Girija Shankar Sahoo, Khushboo Sharma</i>	
Wavelet-Based Data Compression for Remote Sensing and Image Processing .....	1693
<i>Dhyan Chandra Yadav, Atul Dadhich, Ananya Saha</i>	
Mitigating Denial of Service Attacks in Software-Defined Networking Environments.....	1698
<i>Rahul Pawar, Akhilendra Pratap Singh, Khushboo Sharma</i>	
Investigation of Quality of Service in Various Mobility Protocols for Wireless Local Area Networks.....	1703
<i>Deepalata Sharma, M N Nachappa, Rakesh Kumar Yadav</i>	
Exploring the Complexities of Multiple Access Channels with Multiple Input Multiple Output (MIMO) Techniques .....	1708
<i>Chandra Prakash Lora, Taskeen Zaidi, Megha Pandeya</i>	
Employing Light Wave Integrated Networks in High Capacity Communications .....	1714
<i>Ritesh Kumar, Sunita Bishnoi, Manivasagam</i>	
Impact of Antenna Beam Patterns on the Performance of Satellite Communication Links .....	1720
<i>Ganesh D, Ramakant Upadhyay, Ashendra Kumar Saxena</i>	
Combined Range Detecting Then Channel Allocation in Cognitive Radio Networks: A Compressive Sensing Perspective .....	1726
<i>Ajay Rastogi, A Rengarajan, Rishi Sikka</i>	

Performance Comparison of Routing Protocols for Mobile Wireless Mesh Networks .....	1732
<i>Kavitha R, Chandra Kant Gautam, Pradeep Kumar Vera</i>	
Implementing Robust Color and Multispectral Image Recognition with Deep Learning .....	1738
<i>Rahul Pawar, Prafull Kumar, Kul Bhushan Anand</i>	
Image In-Painting for Video Processing: Techniques and Performance Evaluation.....	1743
<i>Laxmi Goswami, Arun Gupta, Preethi D</i>	
Assessment of Image Blurriness in Different Compression Formats .....	1749
<i>Rajneesh Kumar Tyagi, Garima Goswami, M N Varun Somanna</i>	
Assessing the Role of Reconfigurable Network Protocols in Communications Software Design .....	1754
<i>Girija Shankar Sahoo, Atul Dadhich, Manju Bargavi</i>	
Impairment-Aware Symbolic Modulation for Automatic Signal Processing.....	1759
<i>A Rengarajan, Ankita Agarwal, Sunita Bishnoi</i>	
Impact of Power Transients on Optical Amplifier Characterization and Performance in Long-Haul Transmission Systems .....	1764
<i>Dharman J, Harish Patil, B. S. Halakarnimath</i>	
Capacity-Achieving Coding Schemes for Multiple Access Channels .....	1770
<i>Dharman J, Harish Patil, B. S. Halakarnimath</i>	
Efficient Resource Management for Massive MIMO Systems with Hybrid Beamforming .....	1776
<i>Dharman J, Harish Patil, B. S. Halakarnimath</i>	
Analyzing Real-Time Applied Applications in Silicon on Chip.....	1782
<i>Govind Shay Sharma, Syed Harron, Akhilendra Pratap Singh</i>	
Establishing a Novel CAD-Based Paradigm for Design of VLSI Integrated Circuits.....	1788
<i>Ankita Agarwal, Murli Manohar Gour, Manivasagam</i>	
Analysis of Antenna-To-Antenna Spatial Correlation in Multi-User Millimeter-Wave Systems .....	1794
<i>Deepak Kumar, Febin Prakash, Gaurav Shukla</i>	
Statistical Methods for Performance Analysis of Data Processing Systems in High-Performance Computing Environments.....	1799
<i>A Kannagi, Neeraj Das, Meenakshi Dheer</i>	
Evaluation of Dynamic Resource Allocation for Multi-Core ASICs.....	1805
<i>Chetan Chaudhary, Chandra Prakash Lora, Bhuvana J</i>	
Modeling Non-Deterministic Behaviors in System Level Design for Real-Time Systems .....	1810
<i>Feon Jaison, Vaishali Singh, Amandeep Gill</i>	
Secure Energy-Efficient Resource Allocation and Relay Selection for Cooperative Communications in Wireless Sensor Networks.....	1816
<i>Manju Bargavi, Akhilendra Pratap Singh, Chandra Prakash Lora</i>	
Privacy and Security Issues in Mobile Communication Systems.....	1822
<i>Nidhi Saraswat, Puneet Agarwal, Bhuvana J</i>	

## Author Index