

# **2024 IEEE International Conference on Information Technology, Electronics and Intelligent Communication Systems (ICITEICS 2024)**

**Bangalore, India  
28-29 June 2024**

**Pages 1-633**



**IEEE Catalog Number: CFP24UP9-POD  
ISBN: 979-8-3503-8270-9**

**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:	CFP24UP9-POD
ISBN (Print-On-Demand):	979-8-3503-8270-9
ISBN (Online):	979-8-3503-8269-3

**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)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## TABLE OF CONTENTS

Accuracy Enhance of Smart Energy Theft Detection Using Machine Learning Classifiers .....	1
<i>Deepa K R, Ravishankar H, Likhitha R, Aishwarya M, Swetha G, Chetan S M</i>	
Revolutionizing Kidney Disease Diagnosis: A Comprehensive CNN-Based Framework for Multi-Class CT Classification .....	7
<i>Gunjan Sharma, Vatsala Anand, Rahul Chauhan, Hemant Singh Pokhariya, Sheifali Gupta, G Sunil</i>	
Multiclass Kiwi Leaf Disease Detection Using CNN-SVM Fusion.....	13
<i>Taifa Ayoub Mir, Sheifali Gupta, Priyanshi Aggarwal, Hemant Singh Pokhariya, Deepak Banerjee, Ayapal Lande</i>	
Hybrid CNN-SVM System for Multiclass Detection of Apple Leaf Diseases .....	19
<i>Taifa Ayoub Mir, Sheifali Gupta, Sonal Malhotra, Swati Devliyal, Deepak Banerjee, Kanegonda Ravi Chythanya</i>	
Digital Filter Design Using Soft Computing Technique.....	25
<i>Navjot Singh Talwandi, Swati</i>	
Predictive Modelling of Diabetes Detection Using User Interface Designing Tool .....	32
<i>M. Santhoshi, G. Pranav Kumar Reddy, R. Ujjwala Naidu</i>	
Innovative Solutions for Crop Health: A Hybrid Approach to Cotton Root Rot Severity Assessment .....	38
<i>Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar</i>	
Classification of Musical Genres Utilizing the CNN Sequential Model and Deep Learning Techniques.....	44
<i>Muskan Singla, Kanwarpartap Singh Gill, Mukesh Kumar, Ruchira Rawat</i>	
Hybrid CNN & Random Forest Model for Effective Mint Green Leaf Disease Diagnosis .....	49
<i>Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar</i>	
Analysing Digits with Sequential Convolutional Neural Networks and Adam Optimizer .....	54
<i>Muskan Agarwal, Kanwarpartap Singh Gill, Sonal Malhotra, Swati Devliyal</i>	
ResNet50 Utilization for Bag Classification: A CNN Model Visualization Approach in Deep Learning .....	58
<i>Muskan Singla, Kanwarpartap Singh Gill, Rahul Chauhan, Hemant Singh Pokhariya</i>	
Classification of Urban Sound Using Sequential Convolutional Neural Network (CNN) Model and Its Visualisation .....	62
<i>Muskan Agarwal, Kanwarpartap Singh Gill, Saumitra Chattopadhyay, Mukesh Singh</i>	
AI-Driven Insights: Personality Evaluation in Asynchronous Video Interviews for Informed Hiring Decisions .....	67
<i>Kawadgave Avishkar Dnyaneshwar, Gadge Poonam</i>	
Chest X-Ray Based Pulmonary Disease Classification Using Transfer Learning and CNN.....	73
<i>Madhu R. Koravanavar, Rakesh P. Tapaskar</i>	
FUZZY AHP and TOPSIS Approach to Evaluate the Criteria of HVAC Control System.....	79
<i>S. Mayur Gowda, Manjunath Madar Urf Hosamani, Ashwini Kodipalli, Rohini B R, Bhavani Soma, Gargi N</i>	

Software-Defined-Storage Performance Testing Using Mininet .....	84
<i>Deepak Ranoji Naik, Vilas D Ghonge, Smita Mangesh Thube, Abhijit Khadke, Yogesh Kisan Mali, Vishal Kisan Borate</i>	
Analyzing Acute Lymphoblastic Leukemia Across Multiple Classes Using an Enhanced Deep Convolutional Neural Network on Blood Smear .....	89
<i>Janardan Pawar, Amol A. Bhosle, Priyanka Gupta, Hemant Mehta Shiyal, Vishal Kisan Borate, Yogesh Kisan Mali</i>	
Comparison of Machine Learning Models for Identifying Malicious URLs .....	95
<i>Manasi Dnyanesh Karajgar, Sonali Sawardekar, Seema Khamankar, Nalini Tiwari, Manjusha Patil, Vishal Kisan Borate, Yogesh Kisan Mali, Ashvini Chaudhari</i>	
Fruitful Fusion: CNN-Random Forest Synergy in Banana Ripeness Detection .....	100
<i>Yashu, Vinay Kukreja, Prateek Srivastava, Ashish Garg</i>	
Hybrid Model of Data Segregation for Enhanced OS Modularity .....	106
<i>Biswajit Mishra, Roumo Kundu, Pooja Jha, Tannisha Kundu, Mohan Kumar Dehury</i>	
Anylogic and Python-Based Gunshot Detection System Using CNN and Trilateration .....	113
<i>Sanjivani P. Shendre, M. Yagnasri Priya, Swetha Sridhar, Samrudhi S. Kamble, Manju Khanna</i>	
Handwritten to English: AI Manuscript Decoder .....	120
<i>Poojitha D, Tanmay Darak, Ushnish Samaddar, Manju Khanna</i>	
Utilization of Fuzzy TOPSIS and Fuzzy AHP Tactics Inside the Choice of Wastewater Treatment Approaches .....	125
<i>Bharath Kumar B, Dilish M, Ashwini Kodipalli, Rohini B R, Bhavani Soma, Gargi N</i>	
Enhancing Power Grid Resilience: Advanced Strategies for Detecting and Analyzing Faults in Three-Phase Transmission Lines .....	130
<i>Khandakar Rabbi Ahmed, Khandakar Shadman Shayer, Jahidul Islam Shuvo, F. M. Mahmudul Haque, Towfika Salam, Shafiun Miraz, Abdullah Al Noman, Md. Shohanur Islam Sobuj, Md. Yaqub Arafat, Md Istiak Hasan Rial</i>	
Solar Radiation Prediction: A Comprehensive Analysis of Machine Learning Models and Interpretability Techniques .....	135
<i>Kriti Priya Shah, Subodh Narayan Sah, Kadam Prajwal Dharmaraj, Priyanka C Nair, Nalini Sampath</i>	
Heart Stroke Prediction Using Machine Learning and Explainable AI Insights .....	141
<i>Kodati Bhanusri, Karukonda Nithin Reddy, Paluvayi Gnaneswarachary, Priyanka C Nair, Nalini Sampath</i>	
Plant Disease Prediction with Fertilizer Recommendation Engine .....	148
<i>Vipul Kumar, Sonia Raghav, Manmohan Rajpal, Himadri Vaidya, Ruchira Rawat</i>	
A Quadruped Robot with Limbs Integrating Linear Actuator and Revolute Joints .....	154
<i>Nandan Dadhaniya, Rishika Gowtham, Gautham B N, Shreelaxmi M, Rex Joseph</i>	
Estimation of Portable Battery Management System .....	159
<i>Himanshu Patil, Karan Patil, Ganesh Maske, Prathamesh Palande, Rashmi Kale</i>	
Mobile Banking Intention in a High-Risk Situation: Exploring the Impact of Bank Reputation and Security Perception .....	164
<i>Ivan Diriyana Sudirman, Dian Kurnianingrum</i>	

CryptoDomains: Building a Decentralized Domain Marketplace with NFTs .....	169
<i>Sheetal Phatangare, Om Tekade, Prathamesh Thakare, Abhishek Wankhade, Purva Wankhade</i>	
Deep Learning Insights: Evaluating the Efficacy of CNN-SVM for Accurate Kidney Disease Identification .....	176
<i>Raghav Jain, Vinay Kukreja, Saumitra Chattopadhyay, Aditya Verma, Rishabh Sharma</i>	
An Advanced YOLOv7 Model for Vehicle Detection to Enhance the Security of Public Places.....	181
<i>Nikarika, Vinay Kukreja, Nitin Thapliyal, Manisha Aeri, Rishabh Sharma</i>	
An Efficient Auto Regressive Integrated Moving Average Model for AAPL, MSFT, NTFX, and GOOGL Stock Price Prediction.....	186
<i>Nikarika, Vinay Kukreja, Nitin Thapliyal, Manisha Aeri, Rishabh Sharma</i>	
Combining CNN and VGG16: A Novel Deep Learning Approach to Onion Purple Blotch Disease Severity Classification.....	191
<i>Samir Rana, Manika Manwal, Vinay Kukreja, Rishabh Sharma</i>	
Augmented Evaluation of Mango Quality: MLP Model for Five-Class Severity Grading .....	195
<i>Raghav Jain, Vinay Kukreja, Nitin Thapliyal, Manika Manwal, Rishabh Sharma</i>	
Innovative Innings: Exploring Cricket Shot Categories with CNN-SVM Methodologies .....	200
<i>Ankita Suryavanshi, Vinay Kukreja, Shiva Mehta, Ashish Garg, Pallavi Tiwari</i>	
Realtime Guide for Visually Impaired.....	206
<i>Abhinav Prajapati, Nitin Thapliyal, Shiva Parihar, Sachin Upadhyay</i>	
Solution of Optimal Power Flow Problems Using Modified Hunter Pray Optimization Algorithm .....	210
<i>Bimal Kumar Dora, Shreya Singh, Bhushan Bahale, Sunil Bhat</i>	
DcGAN and EfficientNetB3 Based Analysis and Detection of Alzheimer Detection Using MRI Images .....	216
<i>Deepanshi Joon, Rakesh Kumar, Meenu Gupta, Ahmed J. Obaid</i>	
Synergizing CNN and Random Forest for Accurate Cattle Disease Identification .....	222
<i>Yashu, Vinay Kukreja, Prateek Srivastava, Ashish Garg, Shanmugasundaram Hariharan</i>	
Real-Time Caption Generation for the American Sign Language Using YOLO and LSTM .....	228
<i>Urmi Jana, Subhashish Paul, Dinabhandhu Bhandari</i>	
Performance Evaluation of Support Vector Machine with Random Forest and Multilayer Perceptron for the Quality Assessment of Rice .....	232
<i>Geeta R Bharamagoudar, Vijeeta Patil</i>	
Lyrebird-Optimized PI Regulator for Enhanced Load Frequency Control in Two-Area Systems .....	238
<i>P Akila., P. Kezia Joy Kumari, B. M Swetha., E Kavitha., K Mahesh, V. Rajesh Kumar</i>	
Emotion Recognition Using Focal Network and Resnet .....	244
<i>T. Meena, Sigireddy Balasai, Anandh, Duggireddy, P Phaneendhra Kumar</i>	
Prediction of Chronic Liver Disease Using Machine Learning Algorithms and Interpretation with SHAP Kernels .....	250
<i>Harini Raj, Niharika G, Ashwini Kodipalli, Trupthi Rao</i>	
Chatbots for Mental Health: Leveraging LSTM and Seq2Seq Architectures to Enhance User Well-Being .....	256
<i>Arman Ansari, Tejaswani Upadhyay, Himadri Vaidya, Akanksha Kapruwan</i>	

Boxly: Design and Architecture of a Smart Physical Therapy Clinic for People Having Mobility Disability Using Metaverse, AI, and IoT Technologies in Saudi Arabia .....	265
<i>Rayhanah Jassim Aldolaim, Hina Gull, Sardar Zafar Iqbal</i>	
An Efficient Approach for News Summarization Using Map-Reduce and Clustering .....	270
<i>Mukesh Kumar, Saurabh Thapliyal, Anurag Agarwal, Anshul Rawat, Ayush Uniyal, Teekam Singh</i>	
Digital Sensor Forecasting for Metro Air Units: A Vector Autoregression Approach .....	277
<i>Sarvesh Barapatre, Omkar Gangurde, Rohit Bibwe, Shweta Tiwaskar</i>	
Qualitative Analysis of Homomorphic Encryption in Medical Field .....	281
<i>Atharva Mukul Mujumdar, Nirmalya Kar, Priyanka Biswas, Anurag Mathur</i>	
Detection and Classification of Types of Cracks Using Deep Learning.....	287
<i>Siva Charan Kadagala, Harshith Reddy Konda, Prudhvi Sri Harsha Krovvidi, Nalini Sampath</i>	
Digital Forensic Tools: Comparison of Autopsy TSK and Forensic Explorer.....	293
<i>Mitchell Farnan, James Pratt, Andrew David, Masoud Shakiba</i>	
Emotion Detection Based on Text and Emojis .....	298
<i>Anushka Joseph, Shanaya Carvalho, Nicole Saldanha, Phiroj Shaikh</i>	
Predicting Aircraft Turbofan Engine Degradation with Recurrent Neural Networks.....	304
<i>Shivansh Sharma, Akash Kumar Pandit, Sharanya S</i>	
DevOps Dynamics: Tools Driving Continuous Integration and Deployment.....	310
<i>Pradeep Gopal Gowda, Norton Stanley S A, Josephine Eskaline Joyce</i>	
SOBI-ANN Based Induction Motor Fault Classification .....	317
<i>Mukesh Ravindra Chavan, Anjali Uday Jawadekar, Danton Diego Ferreira</i>	
A Comparative Study on Low Noise Amplifiers in RF Receivers for Wireless Applications .....	323
<i>Geethashree A, Praveena K S, Bhargavi K, Archana Raj, Bhanu H S, Tejaswini S</i>	
Low-Cost Non-Invasive Data Acquisition System for Diabetic Detection with IoT.....	328
<i>K. B. Ramesh, Raji Sundararajan, Kamil Firas Khan, Sagar Srivastav, Jayapala, Doddagouda R Patil</i>	
Dysarthric Speech Recognition Using Deep Convolution Neural Network.....	332
<i>Namita Kure, S. B. Dhonde</i>	
Productivity Analysis of Employees in Corporate Sector Using Gesture Recognition .....	337
<i>Aveesah Siddiqui, Siddhi Gadge, Shruti Shelar, Shainila Shaikh</i>	
Computer Vision Based Hybrid Classroom Attention Monitoring.....	344
<i>Saniya Rawat, Malivia Rodrigues, Prateeksha Sheregar, Kalpita Ajinkya Wagaskar, Amiya Kumar Tripathy</i>	
Fusing CNN and XGBoost for Accurate Collard Green Variety Classification .....	350
<i>Yashu, Vinay Kukreja, Mukesh Kumar, Manika Manwal</i>	
Fine-Grained Analysis of Birch Leafminer Disease: Varying Severity Five Class Ensemble Twin CNN Model .....	355
<i>Yashu, Vinay Kukreja, Pallavi Tiwari, Manisha Aeri, Rishabh Sharma</i>	

Overstepping Existing Classifications: Deciphering Five Severity Tiers in Sugar Maple Tar Spot Disease Through Integrated CNN-GAN Models.....	360
<i>Yashu, Vinay Kukreja, Mukesh Kumar, Manika Manwal</i>	
Exploring Position-Based Routing Protocols in Vehicular Ad-Hoc Networks .....	366
<i>Moningi Soumya Shree, Prasant Kumar Dash, Sunil Kumar Sahoo, Ankita Sahu, Rohan Nayak</i>	
Digital Diagnosis: A Machine Learning Perspective on Plant Disease Detection .....	372
<i>Jyoti Ranjan Nayak, Deepak Kumar, S. Bisakha, Omi Sneha, Prasant Kumar Dash</i>	
Activity Identification of Androgen Receptor Ligand Binding Domain Using Voting-Based Ensemble Learning.....	377
<i>Vishan Kumar Gupta, Avdhesh Gupta, Sarvesh Vishwakarma, Arvind Singh Negi</i>	
Comprehensive Analysis of Text Based Sentiment Analysis Using Deep Learning .....	383
<i>Sushadevi Shamrao Adagale, Praveen Gupta</i>	
Performance Evaluation of Underwater Image Enhancement Techniques .....	388
<i>Adagale-Vairagar Shubhangi, Praveen Gupta</i>	
Revolutionizing Ovarian Cancer Diagnosis: A ResNet50 Approach for Precision Classification.....	392
<i>Vijay Madaan, Neha Sharma, Deepak Upadhyay, Swati Devliyal, Bura Vijay Kumar</i>	
Integrating CNN and KNN for Enhanced Celery Variety Classification in India: A Detailed Three-Class Approach.....	399
<i>Panav Khullar, Rishabh Sharma, Deepak Singh Rana, Ashish Garg, Vishal Jain</i>	
An Assessment Study on TV White Space in Nepal Using Low-Cost Spectrum Analyzer.....	403
<i>Bipun Man Pati, Raju Chohan, Raunak Ghimire, Arun Kunwar, Anup Shrestha</i>	
Design and Implementation of Low Power 3-Bit Encoder Using Memristor on LT Spice .....	410
<i>Y. Sreenivasulu Goud, K. Sai Vara Prasad, S. Vinay Kumar, S. Shaikshavali</i>	
Securing Vehicles with Arduino: Implementing Geo-Fencing Technology for Theft Prevention .....	416
<i>Srinivasa R. Gantenapalli, Praveen B. Choppala, Paul D. Teal</i>	
EEG Controlled Robotic Arm Using Fuzzy Logic Controller .....	421
<i>Thasni S, Lal Priya P S</i>	
A Novel Cyclone Detection System Using Deep Learning .....	427
<i>Shekharesh Barik, Rishub Kumar, Siba Narayan Sahoo, Biswa Ranjan Jit</i>	
Smart Agriculture by Leveraging AI and IoT for Intelligent Insect Identification and Control .....	432
<i>Ashok Reddyboina, Talari Pavan Kumar, Saripineni Varshitha, Matta Naveen Reddy</i>	
Control of Solar and Wind Battery Storage Based Micro Grid Using Simulation .....	437
<i>J. Sreedhar, N. Ashish, P. Uday Kumar, V. Pravalika, N. Goutham Reddy</i>	
Power Regulation Features for Artificial Intelligence Based Optimisation of EV Motor Operation .....	444
<i>G. Srinivas, U. Jyothi, T. Suryaprakash Reddy, M. Karthik, A. Vishal</i>	
Advancing Power Quality in Smart Grids Through Tailored UPQC Modifications.....	449
<i>Kandakatta Vishnu, V. Srikanth, M. Rakesh, G. Nishanth, P. Vinay</i>	
An Efficient Convolutional Neural Network Model for Multiclass Rice Leaf Disease Detection .....	455
<i>Archana Saini, Kalpna Guleria, Shagun Sharma</i>	

Forecasting Future Trajectories in Rubber Technology Using Machine Learning .....	460
<i>Taifa Ayoub Mir, Deepak Banerjee, Rahul Chauhan, Mukesh Singh</i>	
Decoding Abnormal Heart Patterns: ECG Anomaly Detection Using MobileNet50 CNN Autoencoder Method .....	466
<i>Muskan Agarwal, Kanwarpartap Singh Gill, Sonal Malhotra, Swati Devliyal</i>	
Enhancing the Diagnosis of Speech Disorders: An In-Depth Investigation into Dysarthria Classification Using the ResNet18 Model.....	470
<i>Khushi Mittal, Kanwarpartap Singh Gill, Kapil Rajput, Vijay Singh</i>	
Innovations in Skin Diagnostic Technologies: Utilizing a DenseNet201 Deep Learning Model for the Early Detection of Skin Cancer .....	475
<i>Khushi Mittal, Kanwarpartap Singh Gill, Mukesh Kumar, Ruchira Rawat</i>	
Performance Analysis of Quaternary Inverter Implemented Using FinFET Models.....	479
<i>Mohit Kumar Goel, Kulbhushan Sharma</i>	
Optimizing Microgrid Performance Using Transient Droop Control .....	483
<i>Venkata Sai Pavan M, Ravindranadh V, Imran Shareef Md, Venkata Sai Sathish D, Puneeth Sai Sankar J</i>	
Boosting ASL Communication with a Convolutional-Bidirectional LSTM Hybrid Model .....	490
<i>Vijay Madaan, Neha Sharma, Sonal Malhotra, Swati Devliyal</i>	
2D Brain MRI Segmentation: U-Nets Versus Optimized DeepLab Models.....	495
<i>Swarangi Vedpathak, Piyush Soni, Srushti Gaikwad, Manish Parmar</i>	
Alzheimer Detection and Classification Using SVM and GAN.....	501
<i>Sanchit Vashisht, Bhanu Sharma</i>	
Credit Card Security Enhancement Through Integrated Machine Learning Techniques.....	506
<i>Swetashree Satapathy, Madhusri Padhy, Shubhasmita Nayak, Priyanshu Patra, Prasant Kumar Dash, Priti Priyadarsani Pradhan</i>	
A Patient-Centric EHR Management System Using Ethereum Blockchain.....	512
<i>Naveen Kumar Pandit, Swatisipra Das, Chandan Kumar Panda</i>	
Customer Segmentation Using Clustering Analysis.....	517
<i>Moses Makuei Jiet, Ahash Kamble, Chetan Puri, Prajyot Yesankar, Prateek Verma, Rajendra Rewatkar</i>	
Pigpen Cipher 9-Grid Characters Classification Using Enhanced CNN Deep Learning Architecture .....	522
<i>Gurjot Kaur, Neha Sharma, Sonal Malhotra, Swati Devliyal, Rupesh Gupta</i>	
Enhancing IoT Object Tracking Using Kalman Filter Algorithm in a Cloud Environment .....	528
<i>Mukesh Kumar, Anshika Saklani, Kirtika Mawal, Ritabh Sharma, Teekam Singh, N L Taranath</i>	
Deep Learning Solution for Diabetic Retinopathy .....	533
<i>Rahul Chauhan, Rohit Negi, Chandradeep Bhatt, Ruchira Rawat, Ravi Ranjan Kumar</i>	
An Extensive Analysis of AI - Generative Art Algorithms .....	539
<i>Harshit Bhatt, Archit Agarwal, Rahul Chauhan, Ruchira Rawat, Ricky Rajora</i>	
Leveraging Convolutional Neural Networks for Classifying Lymphoma Using Histopathological Images .....	545
<i>K R Aravind, K Anil Kumar, V Vijay Deepak Reddy, Priyanka Yadlapalli</i>	



Information Retrieval Using Topic Modeling Techniques on User Generated Content .....	551
<i>Sujata Ramesh Pudale, Sanjukta Ghosh</i>	
AI Based Smart Hydroponics System .....	556
<i>Rudra Prasad, Balaji Koushik S, Prashanth P, Srikanth R, Reddy Sudharshana K</i>	
6G: Enabling the Future of Healthcare Delivery .....	561
<i>Aaitijhya Karak, Abhijit Chirputkar, P Ashok</i>	
Enhancing Casting Quality: CNN-RF Fusion for Accurate Defect Identification.....	568
<i>Taifa Ayoub Mir, Deepak Banerjee, Rahul Chauhan, Hemant Singh Pokhariya</i>	
Realization of 8× 10Gbps WDM System Incorporating Distinct Optical Modulators .....	573
<i>Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi, Amit Kumar</i>	
Design & Development of IOT Based Smart Energy Meter for Energy Conservation .....	578
<i>Viraj Phapale, Retak Jha, Vivek Kannaujiya, Pawan Panchal, Ritik Gupta, Nikita S. Jadhav</i>	
Visio-Voice Transforming Images into Sound for the Visually Impaired.....	582
<i>Gogineni Ashrith Sai, Kondareddy Balaji Reddy, Kothuru Gurunadh, Thanakanti Ganesh Madhav, S. Santhanalakshmi</i>	
Wick-Based Hydroponics System with Mobile Application .....	589
<i>Prianka D, G V Shilpa, Hasina Parvin, B Prerana, Rajashree Gauda</i>	
EfficientNetB1 Model for Lung Cancer Detection Using Biopsy Images .....	594
<i>Jess John, Aaradhya Deotale, Figo Fernandez, Dipti Jadhav</i>	
Sustainable Farming Through IOT-Enhanced Weather Monitoring .....	600
<i>Prof Ankitha A, Rakshitha S, Tejaswini Shivanand Vathar, Tharun S, Chithra H</i>	
Deep Analysis: Apple Fruit Disease Detection Using Deep Learning.....	605
<i>Kavya P, Nischitha S, Nivedita N S, Akshatha Prabhu</i>	
Novel mmWave H-Slotted Microstrip Patch Antenna Array for 5G Communication.....	614
<i>Saswata Mookherj, Aayush Sheth, Swarangi Vedpathak</i>	
Fake Logo Detection Using Image Processing.....	621
<i>Vengamamba Sravya Battini, S. Ravi Kishan, Venkata Divya Valeti</i>	
Cardiovascular Disease Detection in ECG Images Using CNN-BiLSTM Model.....	628
<i>Maddali Lakshmi Meghana, K S Vijaya Lakshmi, Namburu Chaitanya Harshit, K Suvarna Vani</i>	
Modified Blowfish Encryption Standard with Optimization Strategy for Secured Cloud Storage with Data Dynamics .....	634
<i>Prabhdeep Singh, Pawan Singh, Abhay Kumar Agarwal, Anil Kumar</i>	
Image Description Generation Using Deep Learning: A Comprehensive Overview.....	642
<i>Shubh Jain, Siddhant Zawar, Yash Rupchandani, M. A. Chimanna</i>	
Deep Learning Based Speech Emotion Recognition Using Multiple Acoustic Features .....	651
<i>Shwetkranti Taware, Anuradha D. Thakare</i>	
Video Activity Classification : A Comparative Analysis and Deep Learning Based Implementation.....	656
<i>Swanand Purkar, Shriwatsal Patil, Varun Kale, Bhakti D. Kadam</i>	

A Computer Simulation Study of an Improved Apriori Algorithm .....	662
<i>Wenbo Wang</i>	
Action Control and Decision Analysis Based on Reinforcement Learning .....	666
<i>Lei Shi, Zhaodan Xia, Xiaojian Liu, Qiong Wu, Sujun Yang</i>	
Action Recognition Algorithm Exploration Based on Deep Learning .....	671
<i>Liu Yaguang</i>	
Analysis of Improved Algorithm for Digital Filtering in Micro Controller System.....	675
<i>Jian Yang</i>	
Application and Analysis of Fuzzy Hierarchical Model in Education and Teaching Quality Assessment .....	681
<i>Yunping Zhang</i>	
Application of PLC Des Control System in Electronic Control System of Automatic Production Line.....	685
<i>Qi Wang</i>	
Application Research on Overhead Line Phenomenon Based on Online Video Stream Calculation and Analysis .....	690
<i>Guofeng Lan, Wendeng Wei, Wei Li, Zhao Liangliang, Zhao Yankai, Jun Xiao</i>	
Application Strategy Analysis of Multi-Objective Optimization Routing Algorithm in Korean Translation Software.....	695
<i>Haiyan Li</i>	
Asset Optimization Scheme Design with Multi-Objective Optimization.....	699
<i>Huang Jian, Wang Yihan</i>	
Bp Neural Network Research on Enterprise Marketing Strategy Combination .....	704
<i>Tsai Hung-Yi</i>	
Construction of Corpus Segmentation Feature Extraction Model and Its Influence on Literary Translation.....	709
<i>Liyan Zhang, Hailong Zhao</i>	
Construction of Multi-Target Joint Dispatching Model of Urban Regional Integrated Power Energy.....	715
<i>Zhuoyin Zhong, Jinghui Song</i>	
Design and Implementation of a Web-Based Relationship Management System .....	719
<i>Guo Shuangmei</i>	
Design and Implementation of the Cloud Platform Based on Python .....	724
<i>Chen Huang</i>	
Design of Foreign Language Learning System Platform Based on Network Text .....	730
<i>Yu Juan</i>	
Design of Human Resource Management System Based on Ant Colony Algorithm .....	734
<i>Yanling Jia, Yao Xing</i>	
Design of Intelligent Recognition and Translation Model Based on Fuzzy Algorithm .....	739
<i>Wanghai Qian</i>	

Digital Remodeling and Application of Ceramic Cultural Heritage Based on Characteristic Clustering .....	743
<i>Deng Qi</i>	
Digital Transformation Practice of Financial Sharing in the Power Industry Driven by Intelligent Technology .....	748
<i>Yang Le, Li Hanyi, Han Zehua, Wang Huiting, Zhang Xia</i>	
Exploration and Practice of Typical Models of Rural Electrification Under the Background of Energy Intelligence.....	753
<i>Yongchao Liu, Guan Zhao, Xiao Tian, Wenfang Li</i>	
Mural Restoration Research Based on Samples and Deep Learning.....	758
<i>Wei Shi, Xian Ping Meng</i>	
Neural Network Based on Deep Learning Algorithm for Financial Management Early Warning Optimization Model.....	762
<i>Hao Wang, Lei Chen, Lingyang Chen</i>	
Optimization of Logistics Distribution Path for Improved Multi-Objective Genetic Algorithm.....	768
<i>Jingyun Zhang</i>	
Partial Least Squares Optimization with Deep Learning.....	773
<i>Fengyawen Li</i>	
Research and Implementation of Music Recommendation System Based on Particle Swarm Algorithm .....	778
<i>Na Li</i>	
Research on Computer Simulation Model Based on Intelligent Allocation Algorithm.....	783
<i>Wenbo Wang</i>	
Research on Intelligent Creation Based on Collaborative Filtering Algorithm .....	787
<i>Na Li</i>	
Research on the Algorithm for the Design and Implementation of a 3D Visualization Platform for Tourism Resource Management .....	791
<i>Junyi Chen, Hongxia Li</i>	
Research on the Application of Fusion Media News Push Technology Based on Deep Learning .....	797
<i>Lu Han</i>	
Research on the Application of Improved Neural Network Algorithms in Integrated Media Communication .....	801
<i>Xiujuan Wu</i>	
Research on the Construction Model of University Academic Style Based on Association Analysis Algorithm .....	806
<i>Bowen Yang, Kaiyu Li</i>	
Research on the Construction of Parallel Power Supply Hardware Platform of Intelligent and Regulated Switching Power Supply Module Based on Single Chip Microcomputer.....	810
<i>Jian Yang</i>	
Research on the Fractal Image Generation Method Based on the Genetic Algorithm .....	814
<i>Xiaoran Ma</i>	

Research on the Fusion Path of Enterprise Big Data Technology Based on Ant Colony Algorithm.....	818
<i>Yani Liu</i>	
Research on the Impact and Mechanism of Artificial Intelligence on Consumption Upgrading.....	824
<i>Jixu Zhu, Xiaoshi Chen</i>	
Enhancing Intrusion Detection with Grey Wolf Optimization-Tuned Neural Networks in a Big Data Framework.....	829
<i>Madhuridevi L, Sree Rathna Lakshmi N. V. S., R. Ratheesh</i>	
Research on Translation Practice Based on Corpus and Data-Driven Learning.....	835
<i>Lunan Fan</i>	
Simulation of Enterprise Financial Management Early Warning Model Based on Neural Network Algorithm .....	839
<i>Xuanzi Tang</i>	
Smart Service Methods and Systems Based on Innovation and Entrepreneurship Platforms .....	844
<i>Rao Junhua</i>	
Study on Optimization of Landscape Design Strategy in Residential Park Based on Intelligent Algorithm .....	850
<i>Jing Huang</i>	
The Performance of Interactive Genetic Algorithms in Digital Space Design in the Metaverse .....	855
<i>Jinxi Liao</i>	
The Software Verification Tool Examines the Research and Application of Intelligent Robots .....	860
<i>Jiayang Zhang, Mancheng Yi, Feng Luo, Yanxia Wei, Tao Chen, Wenrui Wang</i>	
Advanced Deep Learning Model for Multi-Disease Prediction in Potato Crops: A Precision Agriculture Approach .....	866
<i>Ravi Ranjan Kumar, Anuj Kumar Jain, Vikrant Sharma, Nitin Jain, Purushottam Das, Pooja Sahni</i>	
Enhancing Precision in Papaya Crop Health Management: A CNN-Based Approach for Early Disease Detection and Classification .....	873
<i>Ravi Ranjan Kumar, Anuj Kumar Jain, Vikrant Sharma, Purushottam Das, Pooja Sahni</i>	
Parkinson's Disease Prediction Using Machine Learning Techniques .....	879
<i>M. Harry, V. Vijula, J. Pearly Princess</i>	
Sign Language Recognition System Using Convolutional Neural Network .....	886
<i>Pavan Kumar, Pasam Chanakya, Saranya Velusamy</i>	
Multi-Modal Bird Species Identification: Integrating Deep Neural Networks, Transfer Learning, and Spectrogram Analysis .....	890
<i>Minakshi Rajput, Sushant Khedgikar, Sharvari Tamane, Selvaraj A.</i>	
Design of a 4–2 Compressor-Based Approach for Efficient Approximate Multiplier Design.....	897
<i>Akanksha Singh, Avula Venkata Reddy, Maram Uttam Kumar, E. Chitra, Valarmathi Marudhai, Rahul Mishra</i>	
Synthesis of a Programmable Clock Management Unit Using Clock Dividers and Clock Gating Using 45nm Technology .....	904
<i>Chaithanya D J, Suhas, Prathiksha H L, Shreya R, Ramya, Jaswanth V</i>	

A Holistic Framework for Building Type Classification Using CNN and Random Forest .....	909
<i>Ricky Rajora, Deepak Banerjee, Rahul Chauhan, Hemant Singh Pokhariya, Gotte Ranjith Kumar</i>	
Synergizing CNN-SVM Models for Unified Recognition of Ladyfinger Leaf Diseases .....	915
<i>Ricky Rajora, Deepak Banerjee, Rahul Chauhan, Mukesh Singh</i>	
Intelligent Weight Monitoring: A Telegram Alert System for Multi-Purpose Use in Saline Bottle Management and General Weighing.....	921
<i>Sivalakshmi P, Inbamalar T M, Hari Krishnan C M, Gowtham S, Ganesh K, Akash J</i>	
Predictive Modeling for Mold Material Defects Using CNN-Random Forest Fusion .....	928
<i>Ricky Rajora, Deepak Banerjee, Sonal Malhotra, Swati Devliyal, Gotte Ranjith Kumar, Aarju Rajora</i>	
Peer Link: Personalized Collaborative Partner Recommendation Through Natural Language Processing and Collaborative Filtering.....	934
<i>Ponshriharini V, Priyadarsini S, Janani S</i>	
Predicting Health Insurance Claim Amount Through Machine Learning Algorithms .....	940
<i>Kasarapu Ramani, Siliveri Tharun Kumar, Powrohitham Pavan Sai Datta, Ponne Jamuna, K Sai Nithin</i>	
InkSync: Real-Time Collaborative Whiteboard with Handwritten Text Recognition .....	946
<i>Sarthak Mishra, Kamalini Sahoo, Misha Kakkar</i>	
Fusing CNN and Random Forest for Predictive Modeling of Forging Defects.....	952
<i>Ricky Rajora, Deepak Banerjee, Aarju Rajora, Ramesh Singh Rawat, G Sunil</i>	
Intelligent Framework to Detection of Fake News Using Deep Learning Approach .....	958
<i>Neha Janu, Anjali</i>	
Personalized E-Commerce: Enhancing Customer Experience Through Machine Learning-Driven Personalization .....	974
<i>Aishwarya Gowda A G, Hui-Kai Su, Wen-Kai Kuo</i>	
IoT Advancing Memory Dump Analysis: Integrating Machine Learning Techniques for Enhanced Malware Detection .....	979
<i>Atul Kumar, Kalpna Guleria, Ishu Sharma, Rahul Chauhan, Deepak Upadhyay</i>	
Demultiplexer Power Management: Strategies for Enhancing Energy Efficiency and Thermal Stability .....	984
<i>Gurdeep Singh, Amanpreet Kaur</i>	
An Early Identification of Rice Leaf Diseases Through Efficient DenseNet20 1 Model .....	988
<i>Archana Saini, Kalpna Guleria, Shagun Sharma</i>	
A Deep Learning Approach for Knee Osteoarthritis Classification Using Convolutional Neural Networks .....	993
<i>Rahul Singh, Neha Sharma, Deepak Upadhyay, Swati Devliyal, Akira Singh</i>	
Recognition of Indian Sign Language using SURF, BoW & CNN .....	998
<i>Lalit Kumar Gangwar, Kumud, Vishwadeepak Singh Baghela, Binesh Tyagi, Prashant Johri, Sujeet Kumar</i>	

“SynthDefender”: Orchestrating Cyber Resilience with SVM-ANN Union Against Reconnaissance Intrusion .....	1005
<i>Aadil Khan, Deepali Gupta, Monica Dutta</i>	
An Enhancing Comprehensive Machine Learning Framework for DDoS Defense Through Leveraging Multiple Algorithms .....	1011
<i>Bhasha Pydala, Dinasekhar Govardhan, Chapalamadugu Venkatesh, Kornepalli Lokeshwar Goud, Kavadi Dinesh, V. Jyothsna</i>	
Data-Driven Concrete Quality Optimization in Industry 4.0: Predictive Compressive Strength Modeling Through Machine Learning and Ensemble Approaches.....	1018
<i>Judeson Antony Kovilpillai J, Sulaiman Syed Mohamed, Pragya, Jayanthi S, Viji C, Rajkumar N</i>	
Leveraging ML with XGBoost, CatBoost and LGBost Classifiers to Optimize Water Quality Assessment and Prediction .....	1025
<i>Preet Singh, Taniya Hasija, K R Ramkumar</i>	
Automated Video Quality Analysis Using Deep Learning .....	1031
<i>Yashas Dewan, G. Vadivu, Mihir Singh Malik</i>	
An Adaptive Switching Controller for a Hybrid Electric Vehicle .....	1036
<i>Diddi Ramakrishna, M. Lokesh Reddy, K. Sai Dileep Kumar Reddy, K. Sireesha</i>	
Unifying RNN and KNN for Enhancing Mirai Attack Detection in IoT Networks .....	1042
<i>Ankita Kumari, Deepali Gupta, Mudita Uppal</i>	
Enhancing Cybersecurity: A Fusion Approach of Artificial Neural Networks and Decision Trees for Robust Imbalanced DDoS Attack Detection .....	1047
<i>Ankita Kumari, Deepali Gupta, Mudita Uppal</i>	
Analysis of High-Performance Design Metrics for Multipliers Using Novel System Design Techniques.....	1052
<i>P. Kishore, B. Akash, G. Aditya, N. Harika</i>	
To Enhance VANET Communication Services Using a Metaheuristic Algorithm .....	1059
<i>Madhuri Husan Badole, Anuradha D. Thakare</i>	
Electric Line Fault Detection and Power Consumption Monitoring with Hypertext Preprocessor Application .....	1064
<i>Anci Manon Mary A, Sakthi Navin R, Sibiraj R, Ajay R, Khalied Hameed M</i>	
YOLOv4-Powered Traffic Intelligence: From Detection to Optimization .....	1069
<i>Sinha Sanjiv, Tharunn E, M. Baskar</i>	
An IoT-Enabled Real-Time Smart Agriculture Monitoring and Intrusion Detection System.....	1073
<i>Shafi Shaik, Md. Adhil, M. Jennifer, Mohan Krishna, B Kalyan, Humera Begum</i>	
Chrome Extension for Speech-To-Text Conversion and Text Summarization Using NLP .....	1078
<i>Gayatri Patil, Krithika Saravanan, Bhakti Sapariya, Prajakta Gotarne</i>	
Detection of Seizures Through Pre-Ictal Phase Using Optimized 1D-Capsule Network .....	1085
<i>Jerlin Vinodh, E. Grace Mary Kanaga</i>	
Real-Time Dehazing and Defogging: A Comprehensive Analysis for Single Image Haze and Fog Removal .....	1090
<i>Apurva Kumari, A. Pavan Kumar, B. V. S Tarun Teja</i>	

Design and Implementation of Efficient Block Cipher .....	1095
<i>Korkonda Srivaishnavi, Gorigapudi Sowmya, P Laxmikanth, Manchalla O V P Kumar, Kiran Mannem</i>	
Design of Solar-Piezoelectric Hybrid Energy Harvesting System .....	1100
<i>Aditya Pratap Singh, Ricky Tongbram, Vijay Kumar Tayal, Kamlesh Pandey</i>	
Securing Neural Network-Based Personalized Medicine for Advanced Liver Cancer Detection in Healthcare.....	1105
<i>Salvadi Kasturi, Jagendra Singh, Mohit Agarwal, Ashwini Kumar, Komal Mishra, Yogita Sharma</i>	
Phishing URLs Using Machine Learning Hybrid Stacking Classifier Approach with XGBoost, Random Forest and Extra Trees.....	1111
<i>Chengamma Chitteti, Tanguturi Sai Divya Sree, K. Reddy Madhavi, Pikkili Pooja, Sannapaneni Jayanth, Middi Harshavardhan Reddy</i>	
Data Augmentation and Hyperparameter Tuning Boost Food Image Recognition .....	1117
<i>Ch Prathima, Javvaji Venkata Rao, Patnam Sarath, Palampalli Prathyusha, Ontela Karthik, Sarasapalli Aastha</i>	
Lung Sound Classification Via Improved Deep Architecture with Transform and Spectral Feature Set.....	1122
<i>Ohmshankar S, G. Sudhagar</i>	
Strategic Integration of Predictive Maintenance Plans to Improve Operational Efficiency of Smart Grids.....	1129
<i>Shaman M Bhat, Ashwin Venkitaraman</i>	
Design and Implementation of an AI and IoT-Enabled Smart Safety Helmet for Real-Time Environmental and Health Monitoring.....	1134
<i>Sheetalrani Rukmaji Kawale, Shruti Mallikarjun, Dankan Gowda V, Kdv Prasad, Shekhar R, Anil Kumar N</i>	
Polycystic Ovary Syndrome detection Via Hybrid Model with Improved Resampling Method.....	1141
<i>A. Smitha Kranthi, D. Haritha Donavalli</i>	
Design and Implementation of Underwater Wireless Communication System Using MATLAB.....	1149
<i>Amit Gangopadhyay, P. Naveen Kumar, R. Rushikesh Reddy, S. Mohammed Anees, P. Sivapradeep</i>	
Enhancing Security in CIC IoT Networks Through Machine Learning Algorithms .....	1155
<i>Atul Kumar, Kalpna Guleria, Rahul Chauhan, Deepak Upadhyay</i>	
Advancing Intrusion Detection with Machine Learning: Insights from the UNSW-NB15 Dataset .....	1160
<i>Atul Kumar, Kalpna Guleria, Rahul Chauhan, Deepak Upadhyay</i>	
An Empirical Analysis on ARIMA and Regression Models for Time Series Forecasting on Bitcoin Dataset.....	1165
<i>K Ganesh, M Anbazhagan, Shreyas Visweshwaran</i>	
Minimizing Certificate Verification Time in Blockchain Technology .....	1174
<i>Ankit K C, Rishav Pandey, Deepesh Bhandari, Birendra Khadka, Rojalina Priyadarshini</i>	
Faster Implementation of Binary Counter by Bubble Sorting Network .....	1180
<i>B L Haritha, P. Sathish Kumar</i>	

From Text to Canvas: Unleashing the Artistry of GAN-Driven Image Synthesis .....	1184
<i>Vijay Madaan, Neha Sharma, Rahul Chauhan, Akanksha Kapruwan</i>	
Empowering Digital Resilience: SVM Kernel Comparison for Malware Classification to Enhance Security.....	1189
<i>Preet Singh, Taniya Hasija, Kr Ramkumar</i>	
Deep Learning Associated with Linear Regression for Heart Beat Rate (HBR) and Respiration Rate(RR) Measurement .....	1195
<i>Valarmathi Ramasamy, S. Sugumaran, Kv Praveen, P. Ramani, Venkata Nagaranibandaru</i>	
Quantum-Based QKD and Sugar-Salt Encryption Approach in Cloud-Fog Computing to Strengthen Protection of Online Banking Data .....	1201
<i>Sapthak Mohajon Turjya, Raj Singh, Pritam Sarkar, Sujata Swain, Anjan Bandyopadhyay</i>	
CloudAuc: An Innovative Approach Utilizing Paul Milgrom's SMRA Auction Procedure to Distribute Cloud Resources Among Various Clients .....	1208
<i>Sapthak Mohajon Turjya, Raj Singh, Pritam Sarkar, Sujata Swain, Anjan Bandyopadhyay</i>	
Analytical Framework for Stage-Based Classification of Female Alopecia: CNN-SVM .....	1214
<i>Taiifa Ayoub Mir, Deepak Banerjee, Deepak Upadhyay, Ramesh Singh Rawat</i>	
Design of FIR Filter Using a Novel Approach with High-Speed Multiplier .....	1220
<i>Rangeetha S, Saran Sm, Solamon Suriyan S, Thiyagarajan S</i>	
Design of Tunable Multi-Band Antenna for Wireless Applications .....	1225
<i>Nataraj B, Prabha K R, Sangamesh G, Sanjeev S R, Sona M</i>	
Explainable AI and YOLOv8-Based Framework for Indoor Fire and Smoke Detection .....	1229
<i>Devendra Kumar Dewangan, Govind P. Gupta</i>	
Stress Monitoring and Management System .....	1235
<i>B Reshma, Adithya J, Bhoomika M, Naveen S R, Jisy N K, Vinu R</i>	
Enhancing Human Resource Management Through Deep Learning: A Predictive Analytics Approach to Employee Retention Success .....	1240
<i>Yashu, Rishabh Sharma, Ayushi Jain, Manika Manwal</i>	
Modelling and Analysis of Cascaded DC-DC Converters in Medium Voltage AC Grid-Connected PV-WIND Power Systems.....	1244
<i>H. Kishan, D. Anji Goud, B. Shiva Kumar, K. Naresh, K. Sai Krishna, K. Murali Krishna</i>	
DL Based Heart Disease Prediction System Using CT Scan Images .....	1251
<i>Tamilselvi P, Abirami R</i>	
Missing Persons Comprehensive Tracking System.....	1257
<i>Vasamsetti Sudeksha, Gampa Lahari, Addepalli Naga Sai Srinivas, Kiran Mannem, K Jamal</i>	
A Pipeline Approach to Research Paper Recommendation System Integrating TF-IDF and KNN .....	1262
<i>Suresh Babu Dasari, Pampani Venkata Lakshmi Durga Keerthi, G. Snehitha</i>	
Performance Analysis of Different Ingress Controllers Within the Kubernetes Cluster.....	1270
<i>Garima Rathi, Safiya Amin, Samyak Jain, Mansi Yachawad, Kirti Digholkar</i>	
Dynamic Spectrum Allocation and Pricing in CR-NAN for Smart Grid Using Machine Learning Techniques.....	1276
<i>Md Sabbir Hosen, Sidratul Montaha Silmee, Md. Mehadi Hasan Shamim</i>	



Weighted Convolutional Neural Network for Detection of Microaneurysms and Exudates in Retinal Images .....	1281
<i>P. N. Maldhure, S. R. Ganorkar</i>	
Advancing Sustainability in Communication Systems: Design and Analysis of Energy-Efficient Flip-Flop Circuits on FPGA Platforms .....	1289
<i>Gurdeep Singh, Amanpreet Kaur</i>	
Multi-Resolution Transform Based Image Fusion for Underwater Image Enhancement.....	1293
<i>Smitha Raveendran, Mukesh D Patil, Gajanan K Birajdar</i>	
Implementation of MIPS RISC Processor with Flexible 5-Stage Pipelining and Dynamic Thermal Control.....	1299
<i>Vani B P, Anirudh R, Ashwani Singh B, Jyothi N, Monica N</i>	
Cluster Shape Detection Using Dual Attention Induced Convolutional-Clustering Algorithm.....	1307
<i>Apurba Nandi, Rupayan Halder, Sayantani Ghosh, Amit Konar</i>	
Electrocardiogram Pulse Wave Analysis for Holistic Cardiovascular Assessment .....	1313
<i>Anand Srivatsa, Phani Sai Teja Jampani, N Y Harshita, Fida Faresha, Lekhana G</i>	
Synthetic to Real-World: Insights on Microservices-Based Application Benchmarks.....	1319
<i>M S Rashmi, R Vismaya, Abhishek Patil, G Ranjitha Rani, Tushar N Borkade, Prafullata Auradkar</i>	
Design a 8×10Gbps WDM-WOC System Using Distinct Input Sources in Visible Range.....	1327
<i>Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi</i>	
License Plate Recognition-Based Automatic Gate Opening System.....	1331
<i>Yellanki Revanth, Kalakunnath Namitha</i>	
Impact of Device Parametrics on a 10nm Gate Length SOI n-FinFET .....	1337
<i>Anurag Somayajula, Tanish Aggarwal, Vishnu Sajith, Rishu Chaujar</i>	
Tire Recommendation System for Maximum Space Utilisation of Cargo Container.....	1344
<i>Lakshmi Gadhikar, Sanskar Bomble, Swayam Chatur, Sarvesh Karekar</i>	
A Novel Dielectric Modulated Double Gate Charge-Trapping MOSFET: Ferroelectric Gate Stack and Gaussian Doped Substrate Integration for Enhanced Performance .....	1350
<i>Akshita Swain, Nalin Agarwal, Tanisha Singhal, Rishu Chaujar</i>	
Enhancing Speech Emotion Recognition Through Advanced Feature Extraction and Deep Learning: A Study Using the RAVDESS Dataset .....	1357
<i>Ankitha S M, Ashwinkumar U M</i>	
Voice Mate: Voice Controlled Chessboard for Visually Impaired .....	1364
<i>Anishamol Abraham, Agnel Mammen, Ajay Soyi, Ben Jhonson, Joel Biju</i>	
Attention on Emotions: A Vision Transformer Approach to Advancing Facial Expression Recognition .....	1368
<i>Yuvjeet Arora, Anoop Kumar, Dhuriya Ankit Subhash, Rishav Raj, Sakshi Bajpai, Natasha Sharma</i>	
Light Intensity Analysis and Prediction for Dharana Using LabView.....	1379
<i>M C Chinnaiyah, Janardhan Narambhatlu, Hari Krishna, P Subramanyam Raju, M. Parvathi, B Yamini, A Durga Bhavani, A Vishnu Vardhan</i>	

A Meticulous Analysis of Diverse Human Traits in Avid Readers and Non-Readers Through Advanced Data Analytics and Machine Learning Approach .....	1384
<i>Farook Abdul Aziz A, V. J. Sowmya</i>	
From Data to Dialogue: Building a Domain-Agnostic Conversational Question Answering System.....	1390
<i>Pranav Patil, Justin Mathews, Joel James, Aditya Patil, Smita Rukhande</i>	
Bilingual Approach: Leveraging Deep Neural Network Techniques for Handwritten Signature Authentication .....	1397
<i>Mohanraj P, R. Sophia Janit</i>	
Privacy Transfer Using Digital Forensic .....	1402
<i>Shreya B S, Akhil K M</i>	
Design, Development and Comparison of Hybrid Approaches for DNA Promoter Identification.....	1408
<i>Sara Ranjit</i>	
Identification and Categorization of Paddy Leaf Diseases Using Deep Learning for Efficient Agricultural Practices .....	1415
<i>Annie Sunil George, S. Vinita Sushila Devi</i>	
Helmet Detection System Using Yolo V2 .....	1421
<i>Arun M D R, Vanita Jaitly</i>	
Secure Transmission of Ballots Using Blind Signature for Electronic Voting .....	1427
<i>Md Abdul Based, Rahat Kabir, A. B. M. Toufique-Ul Islam, Mohammad Shorif Uddin</i>	
Efficient Vehicle Detection System Using YOLOv8 on Jetson Nano Board.....	1433
<i>A. Pravalika, Chevella Anil Kumar, E. Sai Praneeth, D. Abhilash, G. Sai Priya</i>	
Enhancing Transparency and Mitigating Bias in Large Language Models' Responses with Sophistication .....	1439
<i>Swayam Gupta, Roumo Kundu, Anuj Kumar Aditya Deo, Manorama Patnaik, Tannisha Kundu, Mohan Kumar Dehury</i>	
Vision Semantics Image Captioner.....	1445
<i>Gavin Pereira, Risha Kundar, Devendra Kushwaha, Phiroj Shaikh</i>	
Optimal Trained Ensemble of Classifiers for Brain Age Prediction Using MRI.....	1452
<i>Vishnupriya G. S, Brintha S. Rajakumari</i>	
A Machine Learning-Based Attendance Management System.....	1461
<i>G Mageshvaran, V. J. Sowmya</i>	
FedAnom: Strengthening Cloud Network Security with Federated Anomaly Detection .....	1467
<i>Manadadi Sriya Reddy, Kalyan Chatterjee, Muntha Raju, Samala Suraj Kumar, Tummala Abhinav Vardhan Reddy, Machakanti Navya Thara</i>	
Acoustic Based Bird Species Classification Using Deep Learning.....	1474
<i>Lade Gunakar Rao, K Sridhar, Sallauddin Mohmmad, Bhargav Somisetty, Rashmi Shivanadhuni</i>	
Twitter Data for Syndromic Surveillance: Insights and Methods.....	1479
<i>Poorna Subramanian, Sachin Ka, Bharath Subramanian</i>	
Pipeline Leak Detection System Using Machine Learning .....	1487
<i>Chitrada Jaswanth, Golla Pavan Shiva, Grandhi Naga Sai Rishi Raj, Thirunavukkarasan M</i>	

Design and Implementation of an Advanced Temperature Control System for Maglev Transport .....	1493
<i>Mohammad Ibrahim, Vihaan Ravishankar, Anjali Jain, Neelam Varma</i>	
Adversarial Attacks Using Carlini Wagner.....	1501
<i>Tarun Aditya Baddukonda, Ronit Kumar Kanakam, B. Yasotha</i>	
Sentiment-Driven Predictive Models for Nifty 50 Stock Market Fluctuations: A Time Series Analysis Perspective.....	1508
<i>Bharathi Mohan, Abhivyakti Yadav, Jayant Toleti, D Sai Sruthik Reddy, R Kaif Ahmed, Gottipati Koushitha</i>	
Exploring the Enabling Technologies of Contactless Fingerprint Reader .....	1516
<i>Hari Mohan Mishra, Amit Kumar Jha, Pushpendra Kumar Sikarwal, Shuja Mirza, Mukesh Kumar, Deepinder Kaur</i>	
Convolutional Neural Network Using Transfer Learning for Brain Tumor Classification.....	1522
<i>U. Sakthi, Kanishk Malik</i>	
Framework for Domain Independent Hybrid Recommender Systems: Addressing Challenges of Imperfect Data.....	1528
<i>Amey Vibhute</i>	
A Two-Speed, Radix-4, Parallel-Parallel Multiplier.....	1532
<i>D. Jessintha, Vithun. N. M, Swetha. S</i>	
Dynamic Portfolio Management Using Multi-Model Reinforcement Learning.....	1539
<i>Naveenkumar Vodnala, Padmasai Yarlagadda, Posani Vamsikrishna, Lokavarapu Tejaswini</i>	
Optimization of Rainfall Prediction Using Satellite Data Through Machine Learning and Deep Learning Algorithms.....	1543
<i>Kasarapu Ramani, Maddireddy Srilekha Reddy, Kelavathi Bhavani, Syed Feeza, Vellampalli Sai Baves</i>	
Enhancing Implant Communication and a Design of a Wearable Flexible Antenna for Ultra-Wideband On-Body Applications.....	1548
<i>Subashree V, Joshua R, Jaswanth Kumar K</i>	
EmoSesense-Automatic Speech Recognition Using AIML Implementation Through Wav2vec2 Model .....	1554
<i>K. Alice, Chetas Shree Madhusudhan, Riya Kumari</i>	
Epicardial Fat Segmentation Using Pyramid Neural Network: An Automated Approach for Cardiovascular Risk Assessment .....	1563
<i>Vinoth Rathinam, S Selvalakshmi.</i>	
Advancements in Hyperspectral Image Processing Using Machine Learning .....	1570
<i>Kasarapu Ramani, P Yukitha, Sake Karthik, Karapakula Aravind Chowdary, Mandapalli Akash</i>	
Emotion Recognition on Speech Attributes Using Machine Learning .....	1576
<i>Roshani Raut, Swapnil Dongre, Divesh Gaonkar, Atharva Mankar</i>	
Application of Machine Learning in Identifying Brain Strokes .....	1583
<i>Vasudevan S, Sneka C, Sairam V S, Thamilselvi S S</i>	
Leukemia Subtype Classification Via Gene Expression Using Machine Learning Algorithms .....	1590
<i>Roshani Raut, Shreya Lokare, Shraddha Gavkare, Mayuri Narute</i>	

Development of a Fast and Energy-Efficient Carrier Bypass Adder with Tunable Delay Extension Using the Han Carlson Adder.....	1597
<i>B. Shyamsundar, R. Venkateswara, H. Pavan Kumar, H. Shree Kumar</i>	
Routing with Interference Reduction and Opportunistic Estimation Against Multiple Jammers in MANETs with Energy Harvesting.....	1601
<i>Chan Dai Truyen Thai</i>	
Binary Classification of Epilepsy Using Classical Machine Learning Algorithms and Ensemble Learning Techniques.....	1608
<i>Samarth Agrawal, Krishnay Mudgal, Shreya Agarwal, Sanidhya Sharma</i>	
Unraveling Deception: Pioneering Machine Learning Solutions for Authenticating News in Evolving Social Media Landscapes.....	1614
<i>Aliasger Shabbirhusein Nazarali, Attaluri Karteek, Himanshu, Neetu Bala, Kulvinder Singh</i>	
Wind Speed Probability Density Forecast Using Optimization Based Kernel Density Estimation and Quantile Regression.....	1620
<i>Deepak Rathod, Lata Gidwani</i>	
Design of Radiation Hardened SRAM Cell with High Speed and Write Stability for Space Applications.....	1630
<i>Anisha Das, Shivabrata Sarkar, Konatham Gayathri, R. Prithiviraj</i>	
Classification of Deep Fake Audio Using MFCC Technique.....	1635
<i>Sivaramakrishnan M, Aaryan Rajput, Saravanan M</i>	
Deep Optimized Smart Healthcare System for the Detection of Diabetes and Cardiovascular Ailments .....	1641
<i>U. Soma Naidu, Rahul S G</i>	
MahitiBandhu: A Solar-Powered Information Kiosk System for Rural Community Empowerment.....	1647
<i>Megha P Arakeri, Lakshmana, Ayush Jain, Hemachandra. G, Mohan Gowda V</i>	
Implementation of OFDM Using GNU Radio with HackRF One and RTL-SDR.....	1653
<i>Y Manasa, D Dharun, U Vamshi, M Gowtham</i>	
LNA Design for Low Noise and High Performance in 180nm Cadence Technology .....	1661
<i>Praveen Kumar S K, Venkateshappa</i>	
Otoscopy Image Classification Using Embedded AI .....	1665
<i>Ancy Jenisha V, Jayanthi S, Judeson Antony Kovilpillai J, Abinaya G, Abinayasri K</i>	
Radial Systems Including DGS Distribution Loss Allocation Using PSO Algorithm.....	1671
<i>T. Penchalaiah, P. Sekhar, G. Ramachandra Reddy, K. Pavan Kalyan, R. Rajendra, B. V. Sai Thrinath</i>	
Dynamic Path Planning of the Robotic Surgical Needle.....	1676
<i>Jyoti Shah, Pawan Kumar Singh Nain, Prashant Johri, Lakshmi Sharma</i>	
Auction Based Dynamic Resource Allocation in Edge Computing .....	1681
<i>Sushree S S Sudha, Aman Anand, Rishab Jain, Dipti Dash, Sujata Swain, Anjan Bandyopadhyay</i>	
Efficient Design of a Double Tail Dynamic Comparator for High Speed and Low Power Applications in 90nm Technology.....	1687
<i>Nelaiahgari Sahana, Shashank Dwivedi</i>	

Optimized Parallel Architecture for a Constant-Time Synchronous Binary Counter with Minimal Clock Period.....	1691
<i>K. Manisha, Guniputi Dheeraj, Kaminahal Matam Manasa Veena, Mandava Rakesh, Makamvamshikrishna Peerayya</i>	
Underwater Wireless Optical Communication with MIMO Spatial Diversity .....	1696
<i>Y Manasa, B Srinidhi, Dvs Sai Prasad, Minhaj</i>	
Enhanced Total Harmonic Distortion in a Hybrid Microgrid with Fuel Cells and Photovoltaic Cell.....	1702
<i>V. Jeetender, M. Arun, M. Saikiran, M. Upendar</i>	
Enhanced Diagnosis Approach of Lung Cancer with Leveraged Deep Learning Models.....	1711
<i>V Kalpana, L Poojitha, K Sneha Latha Reddy, M Rithesh Chowdary, K Himabindu</i>	
Design of Accurate, Power and Area Efficient 16X16 Multiplier Using Approximation Techniques.....	1717
<i>C. Venkata Sudhakar, Lanka Divya, M. Sharath Kumar Reddy, Kare Tharuni, K. Nageswar</i>	
GHI Prediction Based on Weather Data Using Machine Learning.....	1723
<i>Srujan V Hiremath, Raghavendra Naik, Shreepad Naik, Shringar Shettar, Kavita Chachadi</i>	
Optimization of Field-Oriented Control for BLDC Motors in Electric Vehicles Using Bio-Inspired Algorithms.....	1729
<i>R. Gopalakrishnan, Chandrakumar E, Amisha Balan, Chandrasekar T K, Sivasankaran Pillai B, R Sathees Kumar</i>	
Design and Analysis of SAR-ADC for Low Power Circuits.....	1734
<i>A Kalaiselvi, K Giftlin Devapriya, K Gokulprasath, M Premkumaar, K G Shanathi, R Dhivya Praba</i>	
Breast Cancer Determination Using B-Mode Ultrasound Imaging Using Deep Learning Technique .....	1740
<i>Baranidharan B, Sistu Alekhya, Vedant Tiwari</i>	
Fall Detection and Safety Accessory Monitoring System Using Deep Learning .....	1746
<i>Nataraj B, Prabha K R, Alphy Jestin, Avanthikha R, Janani T</i>	
Design and Simulation of MEMS Based Temperature Sensor for Weather Monitoring in a Balloon Satellite: COMSOL Analysis.....	1751
<i>C Harsha Deep, G Sri Venkat, B Muni Sai Vivek, P. Geetha, G Jagadeeswar</i>	
Enhancing Sustainability in Photovoltaic Technology: Optimization of $\text{NH}_2(\text{CH}_2)_2\text{NH}_3\text{MnCl}_4$ Perovskite Solar Cells.....	1757
<i>Aniket Verma, Nikhil Shrivastav, Jaya Madan</i>	
Design of Dual-Band Miniaturised Wearable Antenna at 433 MHz and 915 MHz.....	1761
<i>K. C. T. Swamy, Shaik Samiya Shireen, Jamadanda Soujanya, Yanamala Tejaswini</i>	
Zero-Shot Object Detection Using YOLO .....	1765
<i>Anushiya R, France K</i>	
Insomnia Staging Through Facial Expression Analysis: A CNN-LSTM Hybrid Model.....	1770
<i>Pritha Singha Roy, P. Hiranmani Bala, Gunjan Thakur, Vinay Kukreja</i>	
Unmanned Aerial Vehicles by Implementing Mobile Edge Computing for Resource Allocation.....	1776
<i>Vraj Nilay Shah, Raj Singh, Sapthak Mohajon Turjya, Parv Ahuja, Anjan Bandyopadhyay, Sujata Swain</i>	

An Automated Approach to Petechiae Detection: Advancement in Medical Imaging and Diagnostic Systems.....	1781
<i>Naga Sri Sai Subhash T, Shaik Riyaz, Saketh Reddy Ch, Ayyem Pillai</i>	
The Allocation of Channels Within Cognitive Radio Based Smart Grid Using RHGO with Deep Q Probabilistic Procedure.....	1786
<i>Md Sabbir Hosen, Md. Mehadi Hasan Shamim, Sidratul Montaha Silmee</i>	
Low Power and High Throughput 12-Tap FIR Filter Using Unfolding Algorithm.....	1795
<i>Pinninti Kishore, Vishlavath Tarun, Segi Reddy Venkata Satya Siva, Sreemayi Kompella</i>	
Battery Range Estimation in Electric Vehicles Using Machine Learning and Deep Learning Techniques.....	1801
<i>Sulaiman S. M., Judeson Antony Kovilpillai J, Mahmood Hussain Mir, Golda Brunet R, Pragya, Soumi</i>	
Hyperparameter Tuning and Validation of Neural Network Model for Software Effort Estimation with NCA Based Feature Selection .....	1808
<i>Sushma Khatri, Pratosh Bansal</i>	
Efficient Clocking Strategies for Adiabatic Quantum-Flux-Parametron 8-Bit Ripple Carry Adder Implementation.....	1814
<i>M. Dharani, Dudekonda Upendra, Bathula Surendra Babu, Bingi Sathwika, Chinnepalli Harika</i>	
Design and Analysis of Different 2-Stage Dynamic Comparators for Low Power Consumption and High Speed .....	1820
<i>Talararla Vishnu Sreelatha, Bharathi S H</i>	
Implement a PnR Flow to Boost the Pin Density in Block Level Chip Design.....	1824
<i>J. Charles Pravin, Pranay Borupothu, Nandyala Raja Thaneesh Reddy, Ansar Hussain Shaik, Boggula Sai Prakash Reddy</i>	
Implementing Convolutional Neural Networks and AdaBoost for Varied Turmeric Discrimination in India.....	1830
<i>Rishabh Sharma, Ajay Sharma, Shanmugasundaram Hariharan, Shubham Mahajan</i>	
Fuzzy PID Controller Design for Enhanced Voltage Regulation in Automatic Voltage Regulator System .....	1835
<i>Mou Das Mahapatra, Kuntal Konar, Surajit Mahato, Vikash Kumar, Pritam Dey</i>	
Performance Analysis of Optimized Non-Linear Discrete PID MPPT for Efficient Battery Charging Incorporated with Grid .....	1842
<i>Anupama Ganguly, Pabitra Kumar Biswas, Sarasij Adhikary, Pradipta Acharya, Suraj Gupta</i>	
Performance Evaluation of Off-Chain Storage Systems in Blockchain Environments .....	1847
<i>Puneetha R, Tanuja R, Manjula S H</i>	
Virtual Reality in Electronics and Communication Engineering Education.....	1851
<i>Mihir Jain, Surender Soni</i>	
Design of RNS-KSA Based 2D FIR Filter .....	1856
<i>Raghavendra Reddy, B. Rajesh, A. Nandini, Prem Kumar, K. S. Chakradhar</i>	
Movie Recommendation System Based on Emotion Detection Using Machine Learning Techniques .....	1861
<i>* SR Vaishnavi, Sreelakshmi S, Anu Prabha R S</i>	

NLP-Driven Malware Classification: A Jaccard Similarity Approach .....	1867
<i>Bishwajit Prasad Gond, Md Shahnawaz, Rajneekant, Durga Prasad Mohapatra</i>	
A Hybrid Model for Abnormalities Detection in Upper Extremity Radiographs .....	1875
<i>Abhilesh Thakuria, Mriganka Deka, Faruk Abdulla, Suganya Devi K, Rahul Kumar, Prasenjit Dhar</i>	
Implementing Interference Minimization Algorithm for Improved Performance in 8×8 MU-MIMO Systems.....	1881
<i>T. Shanthi, S R Sree Lakshmi, G Saileela, N S Sneha Latha</i>	
Efficiency Analysis of Adder Architectures: A Comparative Study Across Various Bit Lengths.....	1890
<i>Moulik Tammana, Mantri Vardhan, Geethu R. S., Abhimanyu S, Anujith A</i>	
Enhancing the Survivability of UAV Using Multi-Sensor Data Fusion .....	1896
<i>Shiba Hizkial, Farooque Azam</i>	
Advanced Power Quality in Hybrid PV-Wind Systems with TSK Fuzzy Control .....	1901
<i>S. Farook, B. V. Sai Thrinath, K Nagalingachary., V Bhargavi Boyinasetty, S. Jayakumar, Boothapati Anil Kumar</i>	
An Optimized Blockchain Model for Secure and Efficient Data Management in Internet of Things* .....	1906
<i>Ali Mansour Al-Madni, X. Ying, Mohammed Tawfik, Zeyad A. T. Ahmed</i>	
Knee Osteoarthritis Severity Classification Using STM32 Microcontroller .....	1917
<i>E. Shanthini, Sindhu M, Sharmithaa Sri B B, Swathi Shree S L</i>	
Predicting Pet Photo Pawpularity: A Deep Learning Approach on PetFinder.my .....	1924
<i>Shreya Sivakumar, Prabu Selvam</i>	
Energy Efficient 2D FIR Filter and Multiplier Design for Image Processing Applications .....	1930
<i>C. Venkata Srikanth Reddy, B. Sindhu, A. G. M. Deepak, D. V. S. Preetham, Tvs Gowtham Prasad</i>	
An Grid-Integrated Electric Vehicles with Hybrid Energy Storage for Optimal Power Management .....	1935
<i>S. Farook, B. V. Sai Thrinath, S. Muthukaruppasamy, P. Ponmurugan, V. Kamatchi Kannan, J. V. Pavan Chand</i>	
Predicting App Ratings on Google Play Store: An Ensemble Learning Approach.....	1941
<i>Ravirala Vinay Naga Gopi, Chaganti Siri Vigna, Jasti Phani, Kayala Vishnu Kanth, Maridu Bhargavi</i>	
Music Generation with Long Short-Term Memory Networks from MIDI Data of Classical Music.....	1946
<i>Parth Tiwari, Saurabh Jha</i>	
LTC-AE: Liquid Time Constant Autoencoders for Time Series Anomaly Detection.....	1950
<i>Riya Srisailam Sailesh, Madhu Shree K, Preethan J, Sivaprakash S</i>	
Design and Analysis of NN Controller Based EV Charging Station with Enhanced Power Quality .....	1956
<i>A Gopala Krushna, Valam Deekshith, Peram Nani, K. Gagan Yashwanth, R. Uday</i>	
Design and Simulation of AXI4 Stream Interconnect Using Verilog .....	1961
<i>Prajwal Angadi, Sanket Venkatesh Shenvi, Sathvik Lokesh</i>	
An Efficient Approach to Design Ternary Logic Circuits with GNRFFETs.....	1965
<i>P. Venkat Ramana, Veda Vyas Alpuri, Akhila Chappidi, Sai Jahnavi Devarla, Pavan Kumar Angeru</i>	

Multi-Hop Routing Algorithm with Spatial Correlation Based Clustering Approach ..... 1970  
*P. Susheelkumar Sreedharan, Ashutosh Srivastava*

**Author Index**