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Table of Contents

S. No	Paper Title/ Author Name	Page. No
1	Smart Energy Management System using Automatic Changeover and Current Limiter with Voltage Protection R. Lakshmanan, R. Thamizharasan	1
2	Fire Fighting Robot using Arduino Uno Keertana Iyer, Sania Jadhav, Shretaj Jadhav, Sohan Jadhav, Viren Jadhav, Anant Suryawanshi	8
3	Enhancing Gaussian Mixture Model Efficiency through Covariance Matrix Optimization, Singular Value Decomposition, and Block Toeplitz Matrices Kanchana R, F. Mary Harin Fernandez	13
4	A Comparative Evaluation of H-Infinity and PI Controllers with Emphasis on Motor Selection for BLDC Motor Speed Control in Electric Vehicles Senthil Velan R, Madhankumar A, Aishwarya P, Kirubakaran D	18
5	Design and Analysis of Dynamic Memory Cell using CNTFET, FINFET and MOSFET Susharitha G R, Sathyaprakash B, Paramasivam K	24
6	Design and Analysis of Multiplier in Ternary Logic using Memristor Susharitha G R, Sathyaprakash B, Paramasivam K	30
7	Determining the Toxicity of Water After Oilspill using UAV M. Nagarajapandian, G. Gopu, T. Anitha, G. K. Raksha, S. Sabarisri, S. Sarmitha	36
8	Physics Informed Neural Networks for Reliable SOC Estimation in Lithium-Ion Battery Management Aishwarya P, Senthil Velan R, I. Cephas	41
9	Enhancing Power System Transient Stability and Power Export Capability using Battery Energy Storage Systems and Renewable Energy Integration Vishwanathan A, Prasanth R, Manivannan R	48
10	Efficient Hand Rehabilitation Recognition for Spy-Robot Controlling System Vignesh. V, Azim Ahamed.A, Nisha. P, Gayathri. P	54
11	Velocity Control of DC Motor using Smart Voice Announcement System Priscilla Whitin, K. Anish Pon Yamini, Jeba Singh. O, S. Siva Kumar, Sheila Mahapatra, Rajesh Sharma R	60
12	Next-Gen EV Battery State Prediction R. Tamilkodi, N. Santha Raju, Vajjala Omkar, Koyya Sai, Kunche Prasanth, Nallabothula Chandra	65
13	Performance analysis of Silicon Carbide Processing for power MOSFET K. Karthika, G. Archana, K. Mariammal Alais Mala, I. Vivek Anand, M. Sathish Kumar, T. S. Arun Samuel	72
14	Electric Mobility through Dynamic Wireless Energy Transfer Technology Jayavanthi B M, Snekhya R, S. Karthick	79
15	Performance Evaluation of Linear Integrated Array Antenna for ITU Applications Mary Joy Kinol. A, Marshiana. D, Thaj Mary Delsy. T,	84

	Krishnamoorthy. N. R	
16	Design and Analysis of a Slotted Rectangular Patch Antenna for Dual-Band Radar Applications in C and X Bands Velu Alagumurugesan, Amit Birwal, Satya Sai Srikant, Mohammad Hannan, Saptarshi Ghosh	88
17	Dronexscan: Detection And Identification of Vehicles in Aerial Images Captured by Unmanned Aerial Vehicles (UAVS) J. V. Anchitaalagammai, S. Kavitha, S. Murali, RLK. Sarvesh, S. Seshanand, A. Jayanesh	94
18	Fleet Management System for Electric Buses using ESP32 Microcontroller Ganiss Roger L, P. Nisha	100
19	Enhancing Power Conversion Efficiency in WO ₃ -based Perovskite Solar Cells Through Interface Defect Density Reduction Aniket Verma, Nikhil Shrivastav, Jaya Madan	106
20	Super POS: An Interactive Web-based Quantum Simulator with Real-Time 2D and 3D Visualizations Azeem Arshadullah Usmani, Shreyas Sushil Thale, Nishan Naveen Menezes, Krish N Pinto, Chaitanya V Mahamuni	111
21	A 60-90 GHz 90-nm CMOS Low Noise Amplifier with Optimum NF for Radio Astronomy Receivers V. Vaithianathan, S. Kamalakar, Richard Robinson L	121
22	VLSI Circuit Architectures for Scalable IoT Implementations K. Malarkodi	127
23	Design Conversion of GPDK 180nm to GPDK 45nm Harsha Vardhan Y, Kirti S.Pande	134
24	AR-based Learning Tool for Understanding Light Dependent Resistor Kishan Poddar, Bhanu Sharma, Bura Vijay Kumar	138
25	An Overview of UPFC Applications in Stability Analysis of Power System Aparna Joshi, Sheetal Jangid, Namra Joshi, Mrunali More, Bhagyashri Jadhav,	143
26	A User Guide for Familiarizing with Silvaco-Techmodeler and Silvaco-Gateway tools Mukuljeet Singh Mehrolia, Abhishek Kumar Singh, Ankit Verma	147
27	Microstrip Patch Antenna Design based on Nature Inspired Optimization Algorithms Sandeep Kumar Sunori, Shilpa Jain, Pradeep Juneja, Amit Mittal	153
28	An Effective Investigation on Comprehensive Methodology of Design and Execution for the Development of a Raspberry Pi-based Mini-PC for Enhanced Productivity using IoT Technology B. Nageshwar Rao, K. Vishnuvardhan Reddy, B. Swetha, V. Thrimurthulu	159
29	Solar Cell Defect Detection using Deep-Learning Segmentation with Two-Fold Training Mathiyazhagan Narayanan, Ramya Mohan, Venkatesan Rajinikanth	168
30	Advanced Day-Ahead Photovoltaic Power Prediction through RNN Modeling: Enhancing Forecast Accuracy for Improved Grid Stability S V Dharani Kumar, Thamizharasan R, S. Karthick, Deepak Arumugam, K. Buvaneswari, V. Balaji	173
31	Soft Error Analysis on Junctionless RingFET-based SRAM Ramya M, Nagarajan K K	179
32	Design of Mid Drive Permanent Magnet Synchronous Motor for Electric Vehicle Sundaresh G, Sidharth Ramesh, Malarvizhi K, Nagarajan C	184
33	Design and Implementation of an Intelligent Solar-Powered Street Lighting System with IoT Integration for Enhanced Energy Efficiency and	191

	Adaptive Control Lokeshwar Jaganath. P. K, Raja Vikarama Aswin. K. R. S, Nisha. P	
34	Digital Simulation of ZnON-TFT Anjana J. G, Malavika M. U	197
35	Fault Detection Algorithms for Improving Accuracy in Solar PV System V. Savithiri, S. Gomathi	203
36	Electricity Usage Cost Control Recommendation System using Random Forest and LightGBM Selvanathan N, Muhammad Haniif Hannan S, Mogira Hussain A, NirmalKumar M S	208
37	Filter Performance On Dual Active Bridge DC-DC Converter For Electric Vehicle Applications S. Gomathi, D. Sheela, Carmel Mary Belinda M J, Gowri R, Prema Kandasamy, Leema Nelson	216
38	A Comprehensive Study on Low Power Novel 1-bit CMOS Full Adders: Comparative Analysis and Performance Evaluation Simran Khokha	221
39	Real-Time Traffic Density Monitoring and Adaptive Signal Control using YOLOv8 and Arduino-based LED System J. Nulyn Punitha Markavathi, Saravanaselva N, Viswam M. R, Veeramani M, Pandikannan M	227
40	Raspberry pi based Automated Reminder Pill Box for Elderly People Padma Priya K, Nagarajan R	233
41	RFID-Driven Smart Shopping Trolley Malarvizhi. N, Maimoon, Mohammed Beebi Hazra, Reddy Hema Sri Asritha	240
42	Analysis of Optical Parameters Through Simulation-based Study of N ⁺ Pocket Doped Vertical NC-TFET Rajkumar, Girdhar Gopal, Rajendra Mitharwal, Tarun Varma	246
43	Smart Anomaly Detection in Solar Power Plants with Auto Encoder and LSTM Integration K. Malarkodi, R. Sivabalan, Jayalakshmi. D, Gnanajeyaraman Rajaram, S. Jaanaa Rubavathy, Leema Nelson	252
44	Comparative Optimization of Silicon Dioxide and Hafnium Dioxide-based BIOFETs: Temperature Effects on Voltage and Drain Characteristics Sanjai R, Anandan P	257
45	Design and Performance Analysis of Multi-slot Wearable Antenna for Early Breast Cancer Detection at 2.69 GHz Sathiya. M. J, Anitha. G	261
46	Fine-Tuning Gemma-2B for Text-to-SQL Generation Himadri Neogi, Jishnu Ray, Subhabrata Banerjee	265
47	Adaptive Speed Control of Electric Vehicles using Embedded System in Response to Bank Due Status RamPrabu J, Kamali G P, Soundharya M, Siddharth J	270
48	Improving EV Charging Performance by Streamlining Coil Alignment in Wireless Power Transfer Systems J. Ramprabu, R. Vishwas, P. Jayananth, B. Harish	277
49	Pre-Frontal Electrode-based EEG Analysis for Classifying Specific Learning Disability using Support Vector Machine Induja M C, Geethanjali B, Bruhati S, Aishwarya S, Krupasagar M	285
50	Efficient Li-Fi based Tollgate System with Solar Power and Automation for Seamless Transactions Kamesh G, Vishnu. V, M. Praveen kumar	290
51	Energy Conservation using Piezo Electric Effect Through Modern	295

	Technology P. Chinnasamy, P. Deepalakshmi, Kanaparthi Durga, Kammarapalli Dhathri, Kanchukommula Sai Sri, Kandagaddala Naga Lakshmi Lavanya	
52	Design and Analysis of Low Power Differential Amplifier in SRAM Memory using Sleepy-Keeper Leakage Control Technique Anajaline Jayapraba A, Meenaakshi M, Dinesh Babu S, Pragathy S, Rishikesh R, S. Dharani	301
53	Design of Area Efficient Multiplier using High Speed 15-4 Counter Vasan J K, Sudeshna Shettygari, Hariprasad S, Maria Dominic Savio M	309
54	A Comparative Analysis of Control Mechanisms in Pump Controller Ambarish Narendran, Vijayaditya Annadurai, Kummara Anand Dileep, Shankar Nalinakshan, Ashok Srinivasan	315
55	Improving the Longevity and Efficiency of Electric Vehicle Batteries with Innovative Battery Management Technologies Pushparaj S, Sanjai M, Gopalakrishnan R, Radhamani R	323
56	Regenerative Braking Solutions for Electric Vehicles: Advancing Efficiency and Energy Recapture Syed Abdul Munaaf, B. Vasudevan, Soumyaranjan Routray	331
57	Cyberbullying Detection and Severity Classification using Bi-LSTM K. Nirmala Devi, Vani Rajasekar, P. Jayanthi, Kavin Balasubramani, Kaviya Kandasamy, Keerthana Gowrisankar	338
58	Pioneering Solutions for Advanced Gas Leak Detection in Hazardous Industrial and Mine Environments Sakthimohan M, Dharani S, Logasarathy V, Abiksha S, Elizabeth Rani G	345
59	Advanced Toxicity Assessment: A BiLSTM Approach for Nanoparticle Safety Nisha V S, Rimal Isaac R S	351
60	A Detailed Investigation of Packet Loss in VANETs using Machine Learning Saahil Pakhare, Shreya Hegde, Animesh Giri	358
61	Advanced Nanoparticle Segmentation: A Deep Learning Approach using NS-Net on SEM Images Sowmya Sanan V, Rimal Isaac R S	365
62	Voice-Assisted Navigation System for Geriatrics with Panic Button Integration Kalpana Murugan, V. Sudharsan, M. Lorate Shiny	373
63	Short Review on Optimization Adapted Reliable Constraints based DES in VLSI for Power Grid Design Praveen. A, Vinay Kumar S B, Razia K, Ravi U S	380
64	Comprehensive Analysis on Simulation Parameters of Carbon Nanotube Field Effect Transistors Achsaah Gladith N, Anandan. P	386
65	Decoders for FEC Codes - A Review Selciya Selvan, M. Bharathi, M. P. Sasirekha, P. Anandavalli, Sandhiya. R, Gandhimathi. V	392
66	EnCR_XGBoost: Ensemble Convolutional Recurrent based XGBoost for Autism Detection using MRI Jagadesh Balasubramani, Surendran R	396
67	Comprehensive Survey of Integration of Smart Meters with Renewable Energy Sources Sreeparnesh Sharma Sivadevuni, Raghavendra Maiya, Ruchi Kothari, Adarsh R Krishna	402
68	Enhancing Power System Protection with Prediction of Inertia Constant and Frequency Deviations using Machine Learning	409

	Satyam Sharma, Akash Shenoy, Manitha P.V	
69	Performance Enhancement of Radar System for Detecting Stationary and Moving Targets A. Gowthami, P. Vishnu Vardhan, P. Yuva Praneeth, S. Abdul Kalam, Bala Vishnu J	415
70	Analysis of Tapered Microstrip Patch Antenna with Slot Integration at 28 GHz for Satellite Communications Josiah Samuel Raj J, Anitha G	421
71	Development of Dynamic Source Switching of Battery Charging System for Electric Vehicles Kandasamy V, Harshini V, Ramprabu J	426
72	Design and Modeling of Shape Memory Alloy Spring Actuated Microsystem K. Muralidharan, G. Muthukumaran	433
73	Solar Inverter System with 3-Phase Grid Connectivity and Supercapacitor for Enhanced Energy Efficiency and Sustainability Jambula Snehith Reddy, R Sanjeev Krishna, Posa Achyutha, Manitha P.V.	440
74	Comprehensive Online Power Status Monitoring using Sensor Technology Joebin J S, Kishore Kanna H, A. Maria Christina Blessy	446
75	Interactive Carpentry Training with Augmented Reality Technology Kishan Poddar, Bhanu Sharma, Srinivas Aluvala	456
76	A Power efficient 45nm CMOS Dynamic Comparator with Integrated Charge Pump for Enhanced Speed Performance Brindha. K, Manjula. J	461
77	Advanced Fault Detection in Semiconductor Manufacturing Processes using Improved AdaBoost RT Model Ravi Kumar Vankayalapati, Zakera Yasmeen, Ankit Bansal, Valiki Dileep, Nareddy Abhireddy	467
78	Time-Frequency and Framewise Self-Attention-based DNN with GradCAM++ for Noise-Resilient Environmental Sound Classification Brindha R, Chintala Ashithosh, Sai Pradeep Kaduru, Pongiannan R K, Poornima P U, Pemila M	473
79	IoT-Driven Predictive Maintenance for Household Energy Meters: Enhancing Reliability and Efficiency Through Real-Time Data Analytics Senthil Murugan KR, Nikhitha S. V, Yeshaashwini K. R	479
80	Secure and Fault-Tolerant Block Memory Design for IoT Applications Sai Vyshnavi Danda, Saurabh Kesari, Shashank Kumar Singh, Jayaraj U Kidav	485
81	Leveraging Fog Computing for Task Offloading in IoT Networks: A Focus on Deadline and Computation Demand Management Ritarani Sahu, Prabhanjan Mishra, Suchismita Chinara	490
82	IoT-Enabled Automated Radish Care System: Intelligent Detection and Response for Watering and Sunlight Needs Nathaniel R. Macaranas, Joseph Andrei A. Mandariaga, Carlos Miguel D. Pablo, Raymund M. Dioses, Joseph Darwin C. Co, Mark Anthony S. Mercado	496
83	Low-Cost IoT Mesh Network for Real-Time Indoor Air Quality Monitoring Fatih Gül, Hasan Eroğlu	502
84	Systematic Analysis of Machine Learning Techniques for Machine Idle Time Detection using Industrial Internet of Things (IIOT) Kamineni B T Sundari, B. Janet	508
85	Smart Living: An IoT-Driven Apartment Management System for Seamless Utility and Rent Billing	515

	Kean Zyril R. Sotelo, Ernest Nowelle J. Matito, Jheryza Niña S, Morante, Ariel Antwaun Rolando C. Sison, Criselle J. Centeno, Mark Christopher R. Blanco, John Ray M. Tenio	
86	Cloud-based AIOT Soil Monitoring System for Earthworms S. Asha Varma, Meghana Mangamuri, Anusha kalagara, Kezia Kurukanti	523
87	Intelligent Daycare: Enhancing Child Safety with IoT and Machine Learning Innovations Amisha Prathyanga, Pasindu Shyaminda, Pasan Chamikara, Sachin Lakshan, Samantha Thelijjagoda, Dharshana Kasthurirathna	530
88	An Effective Investigation on Health Cloud based IoT based Virtual Health Monitoring System Affrose, P. Lata, B. Swetha, B. Nageshwar Rao, G Chaitanya Reddy	539
89	A Cost Effective IoT Based Firefighting Rover S. Dhanasekar, V. Niranchanaa, D. Nivethitha, K.V. Medha, M. Praveenkumar, M. Saravanan	546
90	An IoT-based Power Monitoring Solution with Real-Time Data Display Kanagamalliga S, Sharmila J, Harikaran S, Naveen Kumar G	551
91	IoT-Enhanced Advanced Image Processing Techniques for Plant Disease Detection and Management Chhavi Bajpai, Manish Gaur, Saravanan B, Raja G V, Neeru Malik, M. Sucharitha	555
92	IoT-Enabled Air Quality Monitoring: Advancements, Applications, and Challenges Roshni Ramesh, Hemanth Vallabhu, Akshara Unni, Shankar Nalinakshan	561
93	Fuzzy Logic-Driven Approaches to Enhancing Hardware Security in IoT Devices Rahib Imamguluyev	568
94	Optimizing Automotive Manufacturing Supply Chains with Linear Support Vector Machines Rama Chandra Rao Nampalli, Shakir Syed, Ankit Bansal, Ravi Kumar Vankayalapati, Ramanakar Reddy Danda	574
95	Synergizing Support Vector Machines and Image Processing for Superior Skin Cancer Detection: A Crammer-Singer Approach S. Divya, S. Thilagavathi	580
96	Smart Aging Technology with IoT and Deep Learning Analytics for Elderly Activity Patterns and Health Outcomes V. Prasanna Srinivasan, Pramod Pandey, S. Muthumarakshmi, Jothibabu.Konidhala, M. Rajmohan, S. Murugan	585
97	IoT based Manhole and Drainage Monitoring System A. Roshan, S. Thrideep, B. Koushik, A. Prabhu Chakkaravarthy	591
98	IoT-based Early Heart Failure Prediction: A Hybrid Method using ECG Signal Analysis and the Framingham Risk Score Aswin Sujith Varghese, Hudaif Abdul Hameed Neroth, Adarsh A, Poojashree Murali, Deepa Natesan	598
99	Optimizing Defect Detection in Elastic Optical Networks using a Deep Neural Network and Fuzzy Logic Samreddy Pooja Reddy, A. Praveen Kumar	606
100	IOMT-based Parkinson Therapeutic System Midhun Dinesh N, Rubi P, Asna saniya, Kamalraj S	611
101	Smart Aquarium Monitoring System for Optimal Aquatic Life Management using IoT Rajesh G, B Saroja, S Ramalakshmi Malladi, Gurulakshmi A B, Bhawna Khokher, Sanjeev Sharma	616
102	Service Composition in IoT: A Systematic Approach	620

	Anoop A, Sathya D, Nidhishree M S	
103	IoT Assisted Knee Kinematics Control for Supervised Rehabilitation of Paralyzed Patients T. Mrunalini, N. Mahesh, P. Davesb Prabu, M. Dhanush, C. Hariprasath, R. Karthikeyan	625
104	Implementation of Data Analysis for Affordable Smart Farming based on IoT and Machine Learning Rohini M, Amarnath K, Lokesh B	632
105	Optimized Energy Efficient Routing Network using Lévy Flight with Seagull Optimization in Wireless Sensor Networks M. Buvanesvari, M. Shivaprakash	639
106	An Innovative Regional Condition Hybrid Routing Protocol Accessing in Wireless Networks K. Gunasekaran, S. Kishore Verma, J S Adeline Johnsana, N. Tamilarasan, J. Martin Sahayaraj	647
107	Energy-Efficient Optimization using WSN Framework for Enhanced Smart Agriculture K. Malarkodi, V. Janakiraman, D. Sheela, Carmel Mary Belinda M J, V Balaji, R. Rajeswari	653
108	Design and Characterization of a Ka-Band Parasitic Patch Antenna for 5G Applications Kahkashan Kouser, Mohammad Hannan, Faizan Shafi, Mohammad Aknan	661
109	Energy Optimization in Wireless Sensor Networks using Deep Learning P. Sakthi Shunmuga Sundaram, T. Deepa	669
110	Advances in Localization Techniques for Underwater Wireless Sensor Networks: Challenges, Methods, and Emerging Solutions Puneet Kaur, Kirabir Kaur, Kuldeep Singh, Upinder Kaur, Salil Bharany, Vishnu Kant	677
111	LoRa WAN based Smart System for Unsafe Event Detection in Mining Industry using ML Ramprabu J, Nandhini D	684
112	Graph Neural Networks for Optimizing Reliability in Vehicle-to-Infrastructure Communication in Autonomous Systems Neelamegam G, J. Revathy, M. Kannukiniyal, M. Devendran, Akshya. J, Mani Deepak Choudhry	692
113	Optimizing Trust-based Routing with a Hybrid TCN-ANN Model for IoT RPL Networks Susanna Vipparthi, Esther Daniel, S. Durga, S. Seetha	700
114	5G Deployment Challenges and Solutions: A Comprehensive Review Male Srinivasa Rao, Gidla Sudheer Babu, K Ramesh Chandra, B Tapasvi, B Prudhvi Raj, B Elisha Raju	707
115	Secure Data Flow Between Trusted Networks Parth Sanghani, Sharada Valiveti, Gaurang Raval	713
116	Emerging 6G Services for the Smart Society: Towards Seamless Connectivity Ashish Patil, Sushama Patil, Pritam Nikam, Akshay G. Bhosale, Pravin S. Magdum, Shahadev Hake	718
117	AI Powered Crop Recommendation: A Machine Learning Approach to Sustainable Agriculture B. Murugesu Kumar, A. Arun, K. Gokul Vishnu, R. Janani, M. Mathan Kumar	723
118	Design and Fabrication of 3D Printed Antenna's for 5G Applications Satvik Bhardwaj, Nisha SL, Aryan Arkane, Vaibhav Kumar, Priyam Sharan	728

119	A Review of Temporally Ordered Routing Algorithm Protocol's Challenges and Future Directions Vignesh G, Vengatesan R, R. Mohandas, Balasubramanian S	733
120	Beyond 5G Network for Unmanned Aerial Vehicles: A Survey on Non-Terrestrial-Networks Vengatesan R, Vignesh G, R. Mohandas, Balasubramanian S	741
121	Improved Energy Efficient Divergent Path Routing for Energy-Harvesting Wireless Sensor Networks S. Sivakumar, V. Sabaresan, S. Om Prakash, T. B. Dharamaraj	748
122	Water Quality Evaluation using Machine Learning Pongiannan R K, Akash Sivakumar, Shivain Kohli, Poornima P. U, Lourde Jame S, Pemila. M	754
123	Next-Gen Agro-Innovation: Blockchain and IoT Convergence for Water Optimization and Weed Detection Mohanraj B, Sneka S, Udhaya Priya J, Shyle Trana S, Priya M, Sakthivel P	759
124	Integrating Dung Beetle Optimization in Machine Learning for Advanced Zero-Day Attack Detection and Classification J. Vanitha, P. Anandababu	765
125	Integrating Stacking Ensembles with SVM Kernels for High-Fidelity Malware Classification Preet Singh, Taniya Hasija, KR Ramkumar	773
126	Comparative Analysis of Database Models for Data Management and Security: Evaluating MySQL, Azure Cosmos DB, ScyllaDB, Couchbase, and Firestore in a Student Record System Sathishkumar Veerappampalayam Easwaramoorthy	779
127	Elevating Login Security with Hybrid Encryption Enhanced QR Authentication Busam Venkata Lahari, Busireddy Dhathri, G Nithin, Kavitha C. R	786
128	Marching Forward: Redefining Human-Machine Interactions in Conversational AI through Hybrid Intelligence, Blockchain Security, and Autonomous Agents P. Charanya, Santhos Raj B S, Naveen Kumar T, Pradheeban A	792
129	Enhancing Cybersecurity using Machine Learning Strategies for Phishing Defense C. Jamunadevi, S. Pandikumar, Naveen N, S. Prasath, Dhivyashree S	801
130	Unveiling Network Anomalies: A Machine Learning Approach to Intrusion Detection Anshika Sharma, Himanshi Babbar, Amit Kumar Vats, R Archana Reddy	809
131	Detecting IoT Botnets with Advanced Machine Learning Techniques Anshika Sharma, Himanshi Babbar, Amit Kumar Vats, Bura Vijay Kumar	814
132	A Security Enriched Energy Efficient Data Communication Over Underwater Wireless Sensor Network using AI Powered Hybrid Deep Learning Procedures P. Shyamala Bharathi, M Jaya Bharatha Reddy	819
133	Enhanced Network Security: Real-Time Malicious Traffic Detection in SD-WAN using LSTM-GRU Hybrid Model Nimeshkumar Patel	826
134	AI-Powered Intrusion Detection and Prevention Systems in 5G Networks Nimeshkumar Patel	834
135	Digital Twin-Driven Augmented Vision System for Healthcare S. Kaliappan, S. Logesh	842
136	Blockchain for Secure and Efficient Crowdfunding: An Optimized Particle Swarm Approach	848

	Lakshmanan M, G. S. Anandha Mala, R. Poorni, G. Ilamurugan, R. Sriramkumar, R. Gnanavel	
137	AI-Driven Network Anomaly Detection for Enhanced Cybersecurity and Performance Senthil Murugan KR, Sachin Ram R. N, Kathier Khamar	855
138	Enhanced Web Security using Cross-Feature Analysis of Visual Design, Live Logs and Code Structures Rahul Kumar, Tanvi Sharma, G. Saranya	860
139	Advanced Strategies for Detecting Ransomware Threats Santhi H, Nalagatla Sathish, Daddala Reddy Akash, Vidivada Chowdary Adithya Sai, Peddineni Sai Venkata Ganesh, Madhira Yashwanth Reddy	867
140	Enhancement of Security in IoT using Secure Hash Cryptography Algorithm with Double Encryption (SHCA-DE) G. Uganya, D. Rajalakshmi, Ramarao Vangapandu, M. Dinesh, Jayant Giri, Mahmoud Odeh	875
141	Enhancing Healthcare Record Privacy Through the Integration of Visual Cryptography and Diverse Image Encryption Techniques P. Chinnasamy, P. Deepalakshmi, Dayina Sandeep, Addala Siva Ganesh, Angalakurthi Jaya Krishna, D. Divya Priya	880
142	Multi-Layer Adaptive Intrusion Detection and Mitigation System for SDN Adversarial threats using a BAT-MC Model Bose S, Gokulraj G, Maheswaran N, Logeswari G, Anitha T, Vijayaraj G	886
143	Exploring Machine Learning Algorithms for Detecting Cyber Attacks and Threats Boya Leela Mahesh, Sandeep Kaur	892
144	Blockchain Technology in Secure Voting Systems: Enhancing Transparency and Trust Gomathi A, Sachidhanandam P, Kavinkumar R, Sowndariya K, Sanju P, Ram Kumar R	900
145	Secure Student Record Management using Visual Cryptography in Educational Systems P. Chinnasamy, P. Deepalakshmi, E. KiranChandu, C. Gireesh, G. Kiran, D. Divya Priya	907
146	Hybrid AI Architecture using Edge-Cloud Computing for Secure V2X Communication K. Lalith Williams, Y. Durga Prasanth, M. Jeyaselvi	913
147	An Ensemble Model for User Authentication Leveraging Keystroke Dynamics and Facial Recognition Taduvai Satvik Gupta, Konduru Praveen Karthik, Sri Sai Suhas Sanisetty, Sagar Basavaraju	921
148	Enhancing Cyberbullying Detection in Social Media: Leveraging Ontology with Skip-gram Optimization J. Sathya, F. Mary Harin Fernandez	927
149	Hand Gesture Classification for the Deaf and Mute using the DenseNet169 Model Basel A. Dabwan, Mazen Gazzan, Omar A. Ismil, Enaam A. Farah, Soad M. Almula, Yahya A. Ali	933
150	Blockchain Enabled E-Commerce Supply Chain Management Suchetha G, Sudheesh Patwardhan, Darshith Pandith, Abhishek, Prajwal	938
151	PODX: A Comprehensive Framework for Detecting Prohibited Items in Security X-Rays Ashwini S. Shivane, Sachin Bhoite	946
152	Cyber Attack Detection in Healthcare using Machine Learning and Multi Data Source	952

	Mithun P, Janagiraman S, Deshra K, Abinai sree P	
153	Resource Allocation and Secure Channel Model for Service-Dependent Mobile Edge Computing Madhavi J Kulkarni, M Ramamoorthy	958
154	The Implementation of Blockchain Technology to Manage Data in a Secure and Transparent manner for Biomedical Applications Velmurugan M, D. Nirmala, V. Samuthira Pandi, Jeyanthi P, Monisha T, Bhagyalakshmi T	965
155	Secure Cloud-WSNs with Advanced Intrusion Detection System using Kepler Optimization and Bi-ConGRU Network Approaches Sheela Pitta, S. Gopalakrishnan, S. Ravi Chand	971
156	Sentiment Analysis: A Comprehensive Study of Computational Techniques, Applications, and Datasets Indhumathi S, F. Mary Harin Fernandez	980
157	Social Media Review Prediction based on Sentimental Analysis M. Johnson, E Saranya, V. Saihareesh, S. Ananthi, R. Subha	987
158	Creating user Profiles through Sentiment Analysis of Social Media Ponmalar S, Iswaryapriyadharshni V, Jhansi D	993
159	Machine Learning based Stock Price Prediction using Sentiment Analysis from News Articles Annalakshmi M, Vishnu Kumar M J, Saffryn Timothy S	998
160	Opinion Mining for Comment Sentiment Analysis of Social Media Srikanth Bhat K, Mallesh Sajjan B N, Mohammed Hasan Raza, N. Hemanth Bhat, Naveen B	1004
161	Predictive Salary Modelling: Leveraging Data Science Skills and Machine Learning for Accurate Forecasting Mohammed Ayman Haseeb, Rishi Viswanathan, Kaushik Iyer, Anish Raj Hota, Banu Priya Prathaban	1011
162	Evaluating and Contrasting the Performance of Web Development Technologies C. Swedheetha, Rubi Preethi, Sabreen Maryam, Shruthika C, Vedha Varshini T B J, P. Manikandan	1020
163	Global Energy Consumption Patterns and Optimization using Big Data Aditya Dubey, Anuj Tiwari, Ayush Bhardwaj, Sivamohan S, Krishnaveni S	1025
164	Automated Models in Educational Assessment: A Comprehensive Survey Asha Rani Borah, R S Syam Dev, Bollam Munna Suprathik, Atmakuri Raja Harshini, Yuktha Boggula, Vempalli Charitha	1029
165	Analyzing Dynamic Workload Management and Energy-Efficient Task Scheduling in Cloud Computing M. Prashanthi, B. Lalitha	1035
166	RAG-Enhanced Large Language Model for Intelligent Assistance from Web-Scraped Data Nikunj Kanataria, Kunj Pareshbhai Patel, Hetul Niteshbhai Patel, Parth Goel, Krishna Patel, Dweepna Garg	1043
167	Edge Computing in Electric Vehicles: Enhancing Efficiency and Intelligence S. Bharathi, Suman Tenali, Rekharani Maddula, J Kavitha, Kanakaprabha. S, Muruganantham Ponnusamy	1049
168	Deduplication of Image Files to Reduce the Redundancy in Cloud Storage Ragul. G, Nithyashree. N, Harini K K, A Prabhu Chakkaravarthy	1055
169	Comparative Performance Analysis of SQL and NoSQL Databases for Optimizing Retail and E-Commerce Operations Javid Iqbal Thirupattur, Angel Xian Theng Tan, Su-Lyn Lim, Lauren Hyun-Ee Wong, Mae Jhin Yong, Sathishkumar Veerappampalayam	1063

	Easwaramoorthy	
170	Enabling Protection for Critical Infrastructure Through Security and Privacy in the Industrial Internet of Things B. Yasotha, T. Vijayanandh, P Thirumoorthy, M. Sangeetha Priya, Sasidaran S, S. B. Prakalya	1071
171	A Novel Deep Learning Technique based Automatic Detection of Polycystic Ovary Syndrome using Ultrasound Images J. Prathibanandhi, G. S. Annie Grace Vimala	1077
172	An Intelligent System for Hiring Employees in Organizations MD Samir Akhtar, Gauri Mathur, Jimmy Singla	1082
173	Optimizing Cardiovascular Disease Prediction with Data Mining and Machine Learning Garima Joshi, Namita Joshi, Himanshu Pant, Preeti Malara, Himanshu Rai Goyal	1089
174	Advancing Conversational Chatbots: Optimizing User Interaction and Information Access Elizabeth Rani. G, Thenmozhi M, M. Sakthimohan, D. Amuthaguka, K.Karthigadevi, Gobala Krishnan B	1095
175	Accident Detection System in GHAT Roads Milind Rane, Avishkar Panaskar, Aryan Panindre, Neha Pansare, Shreya Nikole	1101
176	Wild Animal Species Detection System using Embedded Devices P.Sridhar, Kabilan V, Manikandan R, Mukesh Kanna J	1106
177	Optimizing Medication Compliance Through Machine Learning and IoT for Personalized Health Management P. Balaji, I. K. Mohitha, K. Prashanthini, K. Sivaprakash, P. Rithick, S. Kasthuri	1111
178	Enhancing White Blood Cell Detection in Microscopic Images Through Segmentation and Fusion Methodologies S Sasikala, S. Sureshkannan, S Elango, Sundara Rajulu Navaneethakrishnan, R Praveena, T R Ganesh Babu	1118
179	Designing of Smart Pothole Detection System Anushka Maji, Sagnik Sinha, Subhabrata Banerjee, Amit Kumar Das, Malay Gangopadhyay, Roshan Rateria	1124
180	Predicting Land Values: A Socio-Economic Analysis using Machine Learning Kanchana R, F. Mary Harin Fernandez	1131
181	Assessment of Foetal and Neonatal Outcomes in SARS-CoV-1/2-Infected Pregnancies, Utilizing a Machine Learning Approach Sunita Waila Tiwari, Shivali Sagar, Mamta Joshi, Garima Chand, Amit Mittal, Pradeep Kumar Sharma	1138
182	Application of Machine Learning Algorithms for Efficient Disease Prediction Krishna Kumar. N, P. Venkateswarlu Reddy, D. Ganesh, Kotari Nirmala, Modukuru Pradeep, J. Suresh Babu	1145
183	Identification of Diabetic Retinopathy by Transfer Learning based Retinal Images Sreenivas Reddy Sagili, Chandrashekhar Goswami, V. C. Bharathi, S. Ananthi, K Rani, R. Sathya	1149
184	Exploring Machine Learning and Deep Learning Models for Effective Sentiment Analysis on Twitter Pratheeksha Hegde N, Jason Elroy Martis, Sannidhan M S, Pratheeksha S, Rashmitha R Bangera	1155
185	Compact Convolutional Transformers for Multiple Predominant	1163

	Instrument Recognition in Polyphonic Music Lekshmi C. R, Rajeev Rajan	
186	Development of Medical Image Retrieval and Classification using YOLOv7 Segmentation and Inception V3 Classifier K Revathi, S Vijaya Kumar	1169
187	Comparative Analysis of Future Sales Prediction using Artificial Intelligence M. Johnson, P. Arun Prakash, V. Saihareesh, A. Rajiv, S. Ananthi, H. Anandakumar	1175
188	Utilizing AI for Enhancing Diabetes-Related Quality of Life: A Systematic Review of Measurement Tools Shivali Sagar, Sunita Waila Tiwari, Amit Mittal, Garima Chand, Taniya Rawat, Pradeep Kumar Sharma	1181
189	A Comparative Insight into Machine Learning Strategies for Phishing Website Identification Preet Singh, Taniya Hasija, KR Ramkumar	1186
190	Enhancing the Accuracy of Human Activity Recognition using Smartphones using a Hybrid LR-NN Algorithm Suneetha Racharla, M. Venkatesh	1192
191	Emotion-Driven Cyberbullying Detection: A Hybrid Deep Learning Approach Integrating CNN-LSTM and BERT for Enhanced Accuracy Ajanthaa Lakkshmanan, Rishikesh Reddy Kandadi, Satya Anila Manda	1198
192	Image-based Soil Health Analysis using Deep Learning for Precision Agriculture V. S. Saranya, Saikiran Mangali, K Srinija, Galeiah Medabalimi, Meena Devi, R Venkata Ramana N, Ajanthaa Lakkshmanan	1206
193	DMT2 Patient Recognition using Cascaded Back Propagation Neural Network with Lasso Regression Riddhi Verma	1215
194	A Multi-Scale Learning Assisted Neural Network for Improved Object Detection in Complex Environments Karthikayani. K, Subramanyam M Vadlamani, M. V. Siva Prasad, Jayendra Gopal Thatipudi, Kalaivaani P. C. D, Shrikant Upadhyay	1223
195	A Virtual Assistance for Visually Impaired People to Recognize Fabric Pattern and Color using Human Computer Interaction Logic M.S Bravishma Panicker, R. Mohandas, Shanmugasundaram Hariharan, K. Nirmala Devi, M. S. K.Chaitanya, Rashmi Mishra	1230
196	Multi-modal Medical Image Fusion based on cGAN and the Curvelet Transform with 3D Imaging Senthil Murugan KR, Harini S, Jayabharathi P, Shekkina Paulin J, Vishal Oviya S	1238
197	Speech Emotion Recognition for Psychiatric Care using Vision Transformers and Predictive Analysis Ravi Uyyala, M. Sahithya Shelly, S. Trishika Reddy, Raman Dugyala	1242
198	Deep Learning based Detection of Cardiovascular Diseases using ECG Images P Ananthi, K Nirmala Devi, Pradis. T	1248
199	Quantum Machine Learning for the Future Medical Analysis: A Comprehensive Review and Future Prospects Babitha Lincy R, Jency Rubia J, Sherin Shibi C, Nivetha G	1256
200	Models for the Prediction of Cardiovascular Diseases based on Machine Learning- A Brief Review T. Sathish, A. Chinnasamy, S. Prabakaran	1262
201	Categorization of Alzheimer's Disease and Memory Loss by using Fusion	1267

	of Feature Reduction and Kernel SVR C Mariyal, R Latha, C. Selvi, S Elango, J. Kirubakaran, R. Praveena	
202	INNS: A Superficial Learning Scheme to Predict Complex Human Activity Behaviour using Improved Neural Network Schema S. Agnes Shifani, M. Paramaiyappan, Franklin Thamilselvi M. S, M. Deepa Suresh, Jayant Giri, Maram Y. Al-Safarini	1273
203	Smart Shoes for Athletes: A Sustainable Approach for Monitoring and to Improve Performance Pavithra S, Muralidharan K, Keshav Nikkilesh R S, Birundha S	1280
204	Forecasting Sports Performance using Historic Data and Machine Learning Sindhu L, Ragul S, Praveen S, Srideepak P	1286
205	Categorization of Colorectal Polyps using Convolutional Neural Networks for Enhanced Diagnostic Accuracy and Early Detection in Colorectal Cancer Screening S. Murali, J. V. Anchitalagammai, S. Kavitha, Praveshini B N V, Harineeswari K	1292
206	Experimental Evaluation of Internet of Things Assisted Women Protection System with Artificial Intelligence Association J. Gayathri, Vamsi Krishna K P, M. Devasakthi, Thirunavukkarasu P, S. R. Pranav, Bharath M	1298
207	Image Classification of House Interiors and Street Views using Vision Transformer (ViT-B/16) Ritu Rani	1306
208	Temporal Fusion Transformer based Temporal Convolutional Network Model for Sleep Apnea Detection using Single-Lead ECG Signals Ielin Daisy Devashania, Getzi Jeba Leelipushpam Paulraj, Immanuel Johnraja Jebadurai, P. Santhiya	1311
209	Empowering the Blind School Communities by Recognition of Handwritten Braille Text Documents using YOLOv5 Technique Bipin Nair B J, Saketh P, Niranjan	1318
210	Optimization of Speech Emotion Recognition Through Advanced Ensemble Learning Techniques Prathyakshini, Prathwini, Keerthana	1324
211	Improved Bi-directional Long Short-Term Memory for Heart Disease Diagnosis using Statistical and Entropy Feature Set Souptik Sen, Muralidhar Kurni, Ramesh Krishnamaneni, Ashwin Murthy	1331
212	Yoga Pose Detection and Correction using 3D Pose Estimation and Machine Learning Anusha N, Shreya S Prabhu, Shruthi Shekhar Poojari	1338
213	Augmented Reality Navigation Assistance for PLM Offices Integrating Chatbot Functionality for Appointment Scheduling and Information Access Brent Jindrich T. Archico, Ma. Mariel M. Dagohoy, Ariel Antwaun Rolando C. Sison, Criselle J. Centeno, Joseph Darwin C. Co, Vivien A. Agustin	1345
214	Pepper Berries Graded using Deep Learning Models Bipin Nair B J, Abrav Nanda K M, V Raghavendra	1351
215	Identification of Credit Card Frauds using Machine Learning Techniques Shaily Jain, Prakash Srivastava, Neetu Rani, Chander Prabha	1357
216	Analyzing the Performance of Ensemble Machine Learning Algorithms for Predicting Loan Eligibility Santhosh Kumar C, Manishankar S, Perla Madhava Reddy, Keertan Gopal	1362
217	A Hybrid Cognitive-Machine Learning Approach for Personalized and	1368

	Efficient Rehabilitation Laksmi Ramani Burra, B. Sivaneasa, Siva Shankar S, Praveen Tumuluru	
218	Artificial Intelligence and Chatbots: Transforming User Experience in E-tailing K. Balaji, P. Seshagiri Rao	1375
219	Machine Learning Approach to Predict Autism Spectrum Disorder P. Purushotham, Talla Mounika, M Soumya, Shinnu Jangra, V. Helen Sathiya, D. Mohana Geetha	1380
220	OGCP: Experimental Evaluation of Epilepsy Disease Prediction using Optimized Gradient Classification Principle Himayavardhini Jagath Prasad, G. Ramkumar	1386
221	A Robust Deep Learning Model to Predict Epileptic Seizures based on Electroencephalographic (EEG) Signals Himayavardhini Jagath Prasad, G. Ramkumar	1393
222	Cancer Region Segmentation in Pre-processed Breast Ultrasound Image using VGG16 based UNet/SegNet Ramya Mohan, Mathiyazhagan Narayanan, Venkatesan Rajinikanth	1400
223	Deep Learning and Features Fusion for Colorectal Cancer Detection from Histopathology Images Venkatesan Rajinikanth, Ramya Mohan, Mathiyazhagan Narayanan	1406
224	An Iterative PRISMA Review of Deep Learning, Sparse Bayesian, and Compressed Sensing Methods for Channel Estimation in Modern Wireless Systems Vaishali Niranjane, Atish Khobragade	1412
225	A Review Investigation on Current Trends in Smart Unsighted Cane Technology Vinoth Kumar K, Aravinda K, Nikhita G Ghalagi, Neiphretuonuo Rame, T A Aruni Purohith, Vinay V Badigar, Tirotaman K, Noor Zoya	1417
226	Analysis of Cup to Disc Ratio using Fundus and Optical Coherence Tomography Images K Sakthi Murugan, G. L.Karthik, R Latha, Sundara Rajulu Navaneethakrishnan, J. Kirubakaran, T. R. Ganesh Babu	1421
227	Deep Learning Approaches for Microcalcification Detection in Digital Breast Tomosynthesis Jasna. K, Albert Jerome. S	1427
228	Improving Deepfake Detection using Deep Learning Techniques Harsh Ullas Nair, Ananya Tiwari, Noor Rahat, Rohit Kumar Kaliyar, Ankit Yadav	1436
229	Automated Glaucoma Detection from Retinal Fundus Images: Leveraging EfficientNetV2 for Enhanced Diagnostic Accuracy Ruchika Bhuria	1442
230	Nature Meets Technology: Revolutionizing Butterfly Classification with MobileNetV2 Arpanpreet Kaur	1449
231	Deep Learning for Aquaculture: Classifying Fresh and Infected Fish using Convolutional Neural Networks Shanvi Chauhan	1455
232	Insights Into Facial Emotion Recognition-A Comprehensive Review Shanimol. A, J Charles	1461
233	A Comparative study on Combined Economic Emission Dispatch using Machine Learning Techniques A. Nandhakumar, R. Muthukumar	1467
234	Leveraging EfficientNetB3 for Accurate Breast Cancer Classification: Insights and Innovations	1473

	Parul Nasra, Sheifali Gupta, Gotte Ranjith kumar	
235	Enhancing Tourism Experiences Through Immersive Technologies: The Role of Virtual and Augmented Reality Sanchit Vashisht, Bhanu Sharma, Srinivas Aluvala	1479
236	Impact of Hyper Homocysteinemia on Endothelial Dysfunction and Cervical Cancer Recurrence using Machine Learning Techniques S. Geeitha, P. Renuka, C. Kavitha, S. Umamaheswari, R. Dharani, K. Gurunathan	1484
237	AI for Smart Agriculture – A Deep Learning based Turmeric Leaf Disease Detection R. Selvaraj, M. S. Geetha Devasena, T. Satheesh, C. Sathishkumar	1491
238	AI-Driven Safety: Automated Helmet Detection and License Plate Recognition Angayarkanni. SA, Nikhil Bathija, Saketh Sourya J, Nikhil Singh Shekhawat, Rajaram V, Balakiruthiga B	1496
239	Enhanced Medical Image Fusion Through Laplacian Pyramid Decomposition and Weighted Averaging Shweta Sharma, Shalli Rani, Ankita Sharma, Ayush Dogra	1503
240	Benchmarking Machine Learning Algorithms for CAD Prediction using Statistical Tests Santhosh Gupta Dogiparthi, Jayanthi K, Ajith Ananthakrishna Pillai	1508
241	AI based Identification of Plant Health Issues T. Saranya, Subbiah S, Dhanaseelan V	1513
242	Hand Gesture Recognition using EfficientNetB5: A Robust Approach for Real-Time Human-Computer Interaction Jatin Sharma, Jayapal Lande	1518
243	Convolutional Neural Network using Metaheuristic Improved Harris Hawks' Optimization Algorithm for Weed Classification in Cotton Crops S. Ramya, K. Kalimuthu	1524
244	Applying Fuzzy Logic to Improve Customer Review Classification using Bidirectional LSTM Approach Nidamanuri Srinu, Chilukuri Sai Sudharshan Kumar, M. Senthil, Murala Praveena, V. Ramya, J. Hari babu	1531
245	Multi-Model Fusion for Brain Tumor Detection: A Hybrid Deep Learning Approach N. Shyamala, S. MahaboobBasha	1540
246	Traffic Sign Categorization using YOLO Algorithm: Leveraging Real-Time Object Detection for Improved Road Safety Santha Sheela K, Jason Kingsly R, Bhalaji C K, C. B. Selvalakshmi, A. Radhika	1547
247	AI-Driven Retention: A Hybrid Approach to Employee Turnover Prediction S. Ponmalar, N. Affrin Fowmiya, C. Nandhini	1554
248	Multi-Factor Authentication System using Keystroke Dynamics and Biometric Face Recognition with Feature Optimization Jishnu Prasad, Mary Amala Bai V	1560
249	Review on Adaptive Filtering Techniques in Cooperative Localization and Zone-based ECU Architectures for Automotive Systems Jeeva Bharathi K, Thirumoorthi P, Prabhakaran A	1568
250	Computer-Aided Diagnosis of Intervertebral Disc Herniation from Lumbar MRI Aruna Chouhan, Tarun Varma, Rajendra Mitharwal	1575
251	A Predictive and Adaptive Mobile/Web Application for Alzheimers Disease using Machine Learning	1580

	Balamuralikrishnan G, Boomika S, Sri Nandhini R	
252	Hybrid CNN Classifier for Accurate Detection of Oral Cysts in Panoramic Dental Radiograph Sivagami S, Senthilvadivu. S, Geetha. P, Yukthavarshika J	1586
253	Utilization of Artificial Intelligence in Electronic Product Design Ritu Gupta, Anushka Sinha, Aryan Sharma	1592
254	Earthquake Prediction Model using Random Forest and Gradient Boosting Algorithms D. Bujji Babu, MVN L Revathi, M. Senthil, A. Lakshmi Parvathi, B. Sreenilai, Sk. Sheema	1597
255	Integrated Face Counting and Quick Response (QR) Object Detection with Voice-based Alerts: A Smart Vision System D. Sivaraj, Ram Sundar M, Sathish B, Suman M, Madeshwaran S	1608
256	YOLOv8-based Approach for Real-Time Kidney Stone Identification Rosan Aniruth SK, Sugumar G, Ramprakash KR, Karthick K	1614
257	Evaluation of Supervised Classification Techniques for Land Use and Land Cover Mapping in Kalyan-Dombivali Region Yogesh Pandit, Amrit Ghosh	1622
258	Enhancing Road Safety: Analyzing Driver Behavior Through AI-Driven Monitoring Techniques S. Senthil Kumar, KR. N. Vignesh, V. Bhuvanesh	1630
259	Automated Strawberry Leaf Disease Detection using ResNet-50 with K-Fold Cross-Validation: A Novel Approach Eshika Jain, Ravi Kumar	1636
260	ResNet50-based Deep Learning Model for Early Detection and Classification of Mango Leaf Diseases Eshika Jain, Rajat Saini	1642
261	Chronic Kidney Disease Prediction using Optimized Machine Learning and Ensemble Learning Techniques M. Uma Devi, Madaka Hima Teja, Shanmuk Sai Seshagiri Rao K	1647
262	ValueTrix: A Mobile Application for Inventory Management with Optical Character Recognition (OCR) Integration and Profitability Forecasting Jasmine Rose Cabuayan, Hannah Dela Cruz, Angeline Jores, Criselle Centeno, Benito Roger De Joya, Raymund Dioses, Mark Anthony Mercado	1655
263	Comparative Analysis of Machine Learning and Deep Learning Models for High-Precision Classification in Cyberattack Detection Leena S Watson, A. Anitha	1663
264	Hyper parameter-Tuned SGD and GB Techniques for Enhanced Accuracy in Mental Health Monitoring S. Geeitha, Abishree M, Gopika P S, Kanishka S, Krishnadharshini K N, Renuka P	1672
265	An Acceptable Deep Learning Approach for Detecting Drowsiness Muthuraja M, Shanthi N, Aravindhraj N, Sarankanth K, Senthana Vigas M, Shivaani J	1678
266	A Fertilizer Recommendation System for Rice Leaf Plant Subhiksha Murugan, A. Manikandan, S. Hariprasad	1685
267	Optimizing Packet Delivery in Underwater Wireless Sensor Networks: A Comparative Study of Genetic Bee Colony and Ant Colony Algorithms A. Kannappan, Nagesh Kolagani, Vijay Anand Kandaswamy, J. Vishnupriyan	1691
268	Survey on Remote Patient Monitoring System G. Saravanan, R. Punitha Gowri, Arvinth S V, Dheena R S, Krishna Kumar M	1696

269	Multimodal Approach for Diabetic Retinopathy Detection using Deep Learning and Clinical Data Fusion Karthikeyan S, Selva Sangeeth S, Sreeja GG, Sivasanjeev R, Srimathi M	1702
270	Enhancing Rehabilitation Outcomes: A Hybrid Cognitive-Machine Learning Approach Vijaya Chandra Jadala, S. Hrushikesava Raju, S. Adinarayna, Nabanita Choudhury, Shaik Jumlesha, U. Sesadri	1707
271	Advances in Speech and Text Processing for Dravidian Language: A Comprehensive Review Ramkumar. R, Sureshkumar Nagarajan	1715
272	Redefining Bone Marrow Diagnostics with AI-Driven EfficientNetB5 Technology Anurag Bhashkar, Kanwarpartap Singh Gill, G Sunil	1723
273	Hair Style Recommendations using CNN and AR P. Chinnasamy, P. Deepalakshmi, Vummadi Achireddy, T. Sathiya, Rongala Ravi, D. Divya Priya	1728
274	A Novel Enhanced Cuckoo Search-SVM Model for Robust Brain Tumor Segmentation Alphonsa J, V Sheeja Kumari, Roslin Dayana K	1734
275	Enhanced Skin Disease Detection using Deep Learning with Fully-Convolutional Residual Networks and Lesion Index Calculation Unit Thilagavathi. C, Thilagamani S	1741
276	Analysis on Capacity of Next Generation Wireless Communication Networks using Artificial Intelligence Gurupandi D, Premkumar M	1747
277	Enhanced Aerial Vehicle Detection using a Customized YOLOv8 Model for Real-World Applications Maanav Thalapilly, Ketone Agasti, Niranjan S Nambiar, Ananthu Suresh, Anjali T	1751
278	Movie Recommendation System using DBSCAN Algorithm Devvrat Siwach, Falguni Rakhecha, PS Thanigaivelu	1758
279	CNN Architecture for Sclerosis Detection in MRI Data using Deep Learning R. Archana, Bharathwaj R, Kesavan M	1762
280	Anomaly Detection in Network Traffic using LSTM with Attention Mechanism and Willow Catkin Optimization Soni Verma, S. Prabakeran	1767
281	Detecting Retinal Diseases Through the Implementation of Deep Convolutional Neural Networks Saranya S, Ajay K	1775
282	Bitcoin Price Prognosis using Machine Learning A. Benazir Begum, R. Bhuvanesh, R. R. M. Mathesh Babu	1784
283	A Hybrid CNN-GRU Approach for Enhanced LOS/NLOS Signal Classification Sindhu L, Subhalakshmi CT, Pavithira S, Sindhu J	1791
284	A Hybrid Shifted Inverted Euclidean-Linear Kernel with Stacked Classifiers for Tamil Slang Classification Ramkumar. R, Sureshkumar Nagarajan	1797
285	Personalized Food Nutrient Recommendations for Kids using AI and Behavior Analysis C. Anjanamma, G. Sirisha, B. Sravani, K. Shilpa, C V Lakshmi Narayana, V. Vivekanandhan	1805
286	Obesity Level Prediction using ML based on Eating Habits and Physical Condition	1811

	Gummadi Naga Nikhita, Pothuri Surendra Varma, Shaik Pavan Teja, Gummadi Srinivasa Rao	
287	Advancements in Handwritten Character Recognition: A Comprehensive Review Jamalpur Navya Sree, Gade Charan, Sriramoju Kanishka, Kadiyala Ramana	1817
288	Dimensional Dental Model using Long Short-Term Memory (LSTM) & Faster R-CNN Algorithms T. Sunitha, M. Senthil, Doli Gopi Krishna Jangili, M. Praveena	1824
289	The Role of AI in Identifying Depression: A Review of Techniques and Approaches Fiza Gori, Harshita, Samrat Singh, Suhail Javed Quraishi	1830
290	Robust Face Recognition using Histogram of Oriented Gradients and Auto-Associative Memory Network Jay Kant Pratap Singh Yadav, Zainual Abdin Jaffery, Laxman Singh	1835
291	Unlocking Potential of Deep Learning: A Comprehensive Analysis of Legal Case Document Summarization Sneha Ramhari Suryavanshi, Sandeep A. Thorat	1841
292	Redefining Learning Analysis through Identity Santhosh Krishna B V, Neha Jadhav, Kamisetty Jahnavi, Janak Raj Joshi, B. Rishitha Hasini, Cheritha. G	1850
293	AI-Enhanced Hospital Language Interpretation Services using Cloud Computing for Effective Communication Sree Southry S, N. Mohankumar, Thanalakshmi S, R. Aiyshwariya Devi, C. Srinivasan, T. R. GaneshBabu	1856
294	Enhancing Lung Cancer Detection and Segmentation using Advanced Clustering Algorithm for Sustainable Healthcare Solutions Ganga Priyadharshini M, V. Muneeswaran	1862
295	Classification of Common Insects using Transfer Learning and ResNet50 Sakshi, Chetan Sharma, Jaydeep Kishore, Vivek Bhardwaj	1867
296	A Survey on Breast Cancer Prediction using Various Deep Learning and Machine Learning Techniques G. Gurupakkiam, M. Ilayaraja	1872
297	Detection of Deepfake Audio using Deep Learning A. Jaya Lakshmi, V. Sindhuja, B. Meghana, G. Sweekar Gupta	1878
298	Personalized Learning Platform using Artificial Intelligence G. Vijayasekaran, Bibiana Jenifer J, Derangula Sankeerthana, Kuruva Soumya, D Hema, B Kusuma	1883
299	Unravelling Neural Dynamics: Interpretable EEG Auto Encoding for Capturing Sequential Patterns and Cognitive Transition M. Rama, T Nalini, A Gayathri, D. Divya Kalpana, N. Saikiran, V. Ramya	N/A
300	Integrating Neuro-Fuzzy Classifiers with Machine Learning for Improved Healthcare Decision-Making M. Sivaji, R. Sathya, C. Arun Kumar	1899
301	A Hybrid Deep Learning Approach for Brain Tumor Classification Manoj Kumar Sharma	1905
302	Computer Vision based Crop Yield Prediction for Precision Agriculture using Machine Learning Model Arasa Kumar R, Kanagamalliga S, Jaya selvan J, Jawahar K S	1910
303	Analysis of Performance of YOLOv8 Algorithm for Pedestrian Detection Ishita Amol Dixit, Sachin Bhoite	1918
304	Agricultural Text Classification and Production Prediction using Deep Learning Techniques V. Srivallidevi, Veera V Rama Rao M	1925

305	Deep U-Net based Dental Caries Detection and Classification in Panoramic X-ray Images B. Gopinath, R. Santhi, V. Bindhu	1931
306	An Intelligent Early COPD Prediction using Machine Learning Sathish Kumar M, Sagithya T, Arthi S K, Kamalraj Subramaniam	1936
307	Empirical Evaluation of Activation Functions and Solvers on Neural Network Performance Sathish Kumar M, Sagithya T, Arthi S K, Kamalraj Subramaniam	1942
308	NeuroVision: A Comparative Machine Learning Framework for MRI-based Diagnosis of Alzheimer's and Brain Tumors Akshaya A, Jeevitha S, Susendhiran M, S. Gowri	1947
309	Revolutionizing Brain Tumor Detection using Deep Learning Models for Enhanced MRI Analysis Saran K, Vijay M, Hariharan M, Prema D	1953
310	Detection of Multiple Radio isotopes using Deep Learning Techniques Bharathi Paleti, Hanumat Sastry G	1960
311	Particle Swarm Optimization for Efficient Brain Tumor Classification using InceptionV3 Deep Learning Model P. Akhila, G. Prabakaran, K. Pandiyan, S. L. Swarna, Hussain. A, U. Sakthivelu	1964
312	Enabling Mental Wellness Through Interactive Platforms Umanandhini D, Karthika S, Vankadari Chakradhar, Mopidevi Sumanth Teja, Mallela Saisurya Teja	1970
313	Smart Environmental Surveillance System for Satellite Operations Nadanavigneswarar S, Mohamed Sadik Meeran M, S. Karthick	1976
314	Real-Time Mobile Detection to Prevent Cheating in Examinations S. V. Munde, Sachin Bhoite	1982
315	Revolutionizing Plant Health Monitoring: A CNN-based Solution Rajashri Nitin Gaikwad, Sachin Bhoite	1989
316	A Comprehensive Examination of Deep Learning based Tea Leaf Disease Identification Methods M Narendra, Bolla Aditya, B Hari Krishna, K Naga Suresh, C M Suvarna Varma, Kolla Vivek	1996
317	Voice Chat - Bringing Chats to Life using Deep Learning K Varada Rajkumar, N Jayasree, Laxman Vikas Kommireddi, Yogeshwar Rayudu, Mohammed Ikramuddin, Pavan Kalyan Aouti	2001
318	Machine Learning based Mobile Application for Disease Identification in Tomato Leaf Samidha D. Chandvekar, Sachin Bhoite	2007
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