

2025 International Conference on Frontier Technologies and Solutions (ICFTS 2025)

**Chennai, India
27-28 March 2025**

Pages 1-645



**IEEE Catalog Number: CFP25VF2-POD
ISBN: 979-8-3315-0277-5**

**Copyright © 2025 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:	CFP25VF2-POD
ISBN (Print-On-Demand):	979-8-3315-0277-5
ISBN (Online):	979-8-3315-0276-8

Additional Copies of This Publication Are Available From:

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

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

Clustering Approach Based Hybrid Optimization Using Grey Wolf and Moth-Flame Optimization (MFO) in Autonomous Electrical Vehicles.....	1
<i>S. Niranjana, Venkatanares M, C. Subathradevi, Karthikumar. S, N. Nalini, A. Jayanthi</i>	
Optimizing Medical Imaging for Early Kidney Stone Detection Using Deep Learning with Comparative Analysis of Model Performance and Diagnostic Accuracy.....	7
<i>P. Mahendran, Santhosh J, K. Karuppanasamy, Srikanth E M, Ameer Sheriff R, Thiya gavneshwaran G</i>	
A Leveraging Artificial Intelligence (AI) Powered Human Resource Management Strategy with Elevated Performance Metrics to Improve Talent Acquisition and Employee Engagement	14
<i>Liu Chao, Zhang Yi, Zhang Jiyu, Chin Yuk Fong</i>	
Optimized VLSI Architecture of Integrated Bi-Phase Space Encoding with Manchester Encoding Protocol for Lo-RA Applications.....	23
<i>C. Nithiya, M. Jasmin, M. Sneha, Attar Fazooq Hussain, N. Nalini, B. Thiyaneswaran</i>	
An Intelligent Knee Osteoarthritis Disease Prediction Using Hybrid Deep Learning with Classification Principles	32
<i>Sangamithrai K, K. Surendra Reddy, Imad Shalout, Ch. Deepthi, Jayant Giri, Jamal Zaidi</i>	
Energy-Efficient PPG Processor Design for Reliable Estimation of Heart Rate and Biometric Authentication	42
<i>Kolamala Sumathi, D. Suganya, Maruturi Haribabu, Imad Shalout, Giri Jayant, Jamal Zaidi</i>	
An Intelligent Decision Support Framework for Malaysian Homicide Investigations Using the DeepConv-LSTM Model.....	51
<i>Amuthavalli, Valliappan Raju</i>	
Intelligence MAC Model with Efficient Collaborative Lifetime Improvement Model for Vehicular Ad-Hoc Network	60
<i>Samuda Prathima, V. Ramya, Shalout Imad, B. Venkata Prasanth, Giri Jayant, Jamal Zaidi</i>	
Development of an Image Processing Based Student Engagement Prediction in Online Classes by Using Deep Learning Strategy	66
<i>Parabathinibulah Pushpa Rani, I. Rajesh, I. Saidulu, Ala H. Jaber, R Chad ge, Siva Sundaram</i>	
Improved Routing Model with Traffic Accident Prediction Using Machine Learning in Vehicular Communication	74
<i>D. Divya Kalpana, P. Thenmozhi, Ala H. Jaber, Sk. Anjaneyulu Babu, Rajkumar Chad ge, Siva Sundaram</i>	
AI -Based Adaptive Learning Framework for Enhancing Educational Management in Malaysia Using the EduAdaptNet Model	80
<i>Lee Desmond Cheng En, Zhao Jingjing, Jiang Peng, Tam Cheung Chung</i>	
Empirical Evaluation of Learning Assisted Vitamin Deficiency Detection Methodology Using BioMedical Image Processing Logics	89
<i>P. Adi Lakshmi, Dinesh. D. P, T. Sunitha, Ala H. Jaber, Chad ge Rajkumar, Siva Sundaram</i>	

Efficient Node Deployment and Optimization for Cognitive Radio Based Vehicular Communication	98
<i>K. Tamilselvan, Narasimham Anil Kumar, K. B. Jagadish Kumar, G. Vijaya Kumar, Sami Askar, Pallavi Giri</i>	
Experimentally Evaluate the Talent Management Based on Electronic Human Resources in Saudi SMEs to Enhance Digital Skill Proficiency Using Artificial Intelligence	105
<i>Al-Tayyar Raed Saud D</i>	
NGOCL: A Robust Methodology to Identify Bird Species Based on Neural Gradient Optimization and Classification Logic	114
<i>S. Kannan, Tagore Kumar P, Joel T, Sami Askar, Pallavi Giri, Raziff Hamsan</i>	
Improved Network Architecture with Efficient Resource Allocation in Vehicular Communication	123
<i>S. Parvathi, Ata Kishore Kumar, T Satish, Jyothi Pulikanti, Askar Sami, Giri Pallavi</i>	
An Extensive Approach to Detect Apple Fruit Diseases Using Neural Convolutional Learning with Classification Principles	129
<i>Bhavani. G, D Anu, Ibrahim Mohammad Ahmad Mansour, Sachin Bagde, J. Sivakumar, M. Venkatanaresh</i>	
An Intelligent Classification Logic to Differentiate Crops and Weeds Based on Learning Assisted Image Processing Technique	138
<i>K. Suresh, Shaik Heena, P. Elayaraja, Ala'A Al-Shaikh, Neeraj Sunheriya, Raziff Hamsan</i>	
Big Data Analytics in IoT Ecosystems	147
<i>B. Rex Cyril, P. Ramesh, M. Anjankumar, V. Sathiya, Kalai Priya V, Ashok Kumar</i>	
Machine Learning for Energy Consumption Prediction in Smart Homes	153
<i>Anurag Vijay Agrawal, Chandrasekharan Dinesh, Nagella Venkata Ramana, V. T. Vithya, Updesh Pandey, Theresa Cenate C F</i>	
AI-Based Load Forecasting for Demand Response.....	158
<i>Chintureena Thingom, Mohan. S, E. Afreen Banu, E. Saranya, M. Jasmin, K. Anuradha</i>	
Machine Learning Algorithms for Dynamic Spectrum Access in Wireless Networks	164
<i>Sumit Kumar Mishra, E. Afreen Banu, Chandrasekharan Dinesh, A. Sandanakaruppan, Ranjeeth Kumar M, Rajendiran M</i>	
Deep Learning for Real-Time Fault Detection in Power Systems.....	169
<i>Dheeraj Hebri, Sathishkannan R, M. S. Pavithraa, P. Sreelekha, P. Vidhya, Praveen Kumar. D</i>	
Memory and Power Efficient Multiplier Design Using I-ANT Architecture	175
<i>R Lakshmi, Osama Jamal Jamil Abed Al Jawad, G Siva Prasad, C Ravindra Murthy, Yogesh Y. Nandurkar, N. Pavithra</i>	
Smart Grids: AI-Enabled Energy Management and Demand Forecasting	184
<i>Jehankadhim Shareef Al-Safi, Tanusha Mittal, Sreeanandan, Najmuddin Aamer, Harshal Patil, Natrayan L</i>	
Internet of Things-Based Real-Time Monitoring and Control System for Industrial Automation	190
<i>Vinod N. Alone, Gulshan Dhasmana, Najmuddin Aamer, Venugopal N, Sachudhanandan S, Jason Elroy Martis</i>	
AI-Enhanced Robotics in Healthcare: Transforming Diagnosis and Treatment.....	197
<i>N. S. Kavitha, Pareshwar Prasad Barmola, Samatha R Swamy, Najmuddin Aamer, Veena Dinesh, Pratheeksha Hegde N</i>	

Deep Learning Techniques for Sentiment Analysis in Social Media.....	204
<i>Vinod N. Alone, Najmuddin Aamer, Sahana D Gowda, Nayani Sateesh, Mily Lal, John T Abraham</i>	
VLSI Architectures for AI Accelerators	211
<i>Vaithianathan V, R Gowri Shankar Rao, Yalamanchili Adinarayana, M. Deivakani, V. Kamalkumar, S. Kaliappan</i>	
Design and Implementation of Accident Detection and Ant Optimization in VANETs in Smart Cities.....	218
<i>L. Lakshmi Tejaswi, C. Balaji, Ata Kishore Kumar, S Selvalakshmi, G. B. Santhi, D. Arulanantham</i>	
Design and Implementation of a ZigBee-Based WSN for IoT Integration and Monitoring Via Ubidots Platform	224
<i>J. Nirmala Gandhi, Akila R., P. Sreelekha, Bura Vijay Kumar, P. Vanitha, A. Rajendran</i>	
IoT-Based Real-Time Monitoring for Industrial Automation.....	230
<i>Rahul Bhagwan Ingle, Vipin Sharma, D. Kalaiyarasi, Shyamprakash. D, R. Pandian, P. Ramakrishnan</i>	
Pregnancy Growth Data Analytics Using Correlated Antlion Optimized Tangent Approximated Extreme Gradient Learning	237
<i>D. Sudha, P. Sujatha</i>	
Role of Artificial Intelligence to Boost Paychecks and Accelerate Career Growth at Workplace.....	244
<i>Snehal Sunil Shinde, Kavita Ubarhande, Pallavi Shintre, Namita Chawla, Niket Tajne, Shripada Patil</i>	
Predictive Analysis of Financial Markets Using Machine Learning	250
<i>R. S. Balasenthil, Ameyadinath Choudhari, Rajeswaran Ayyadurai, Priti Dadasaheb Mane, Dashrath Bhoite</i>	
Intelligent Mining Vehicles: Autonomous Haulage and Fleet Management with IoT.....	255
<i>Ninad Murlidhar Gawande, B Sugatha Kumari, Manesh R. Palav, Pradip Chakraborty, Sarfaraz Javed, Anupam Sharma</i>	
Improved Game Theory-Based Scheduling Model for Vehicular Adhoc Network	262
<i>B. Raja, A Vamsi, Ala'A Al-Shaikh, B. Dharani, Sunheriya N, Raziff Hamsan</i>	
A Computing Assisted Test Method in Healthcare Industry Using Artificial Intelligence	268
<i>K. K. Karthick, V. Ganesan, R. Sivakumar, M. Sivaraman, Arul Kumar Natarajan, A. Srimathi Shahina</i>	
Experimental Approach to Identify Retinal Diseases Based on Local Binary Pattern Screening with Biomedical Image Assesment.....	274
<i>D. Prasad, Gvss Siva Kumar, M. Theodore Kingslin, Ala'A Al-Shaikh, Neeraj S, Parimala Subramaniam</i>	
Innovative Optimal Path Selection with Street-Centric Routing in Urban Vehicular Ad Hoc Networks	283
<i>M. Anand, P. Venugopal, Dalia Al-Tarazi, Ganesh Kumar M, Rakesh Adakane, Parimala Subramaniam</i>	

miRNA-32 and Hippo Signaling in Cancer Stemness: Integrated Insights from Machine Learning and Bioinformatics	289
<i>Radha Kodiappan, Manpreet Kaur Gurudev Singh, Dheveena Lekshmemanokaran, Leong Wye Hong, Nur Atiqah Azhar, Wendy Wai Yeng Yeo</i>	
A Hierarchical Learning Approach to Detect Aging Faces Based on Local Binary Pattern Evaluation and Optimization Logics	298
<i>B. Vijaya Sekhar, K. V. Ramesh Babu, Joel T, Dalia Al-Tarazi, Alok Narkhede, Parimala Subramaniam</i>	
Energy-Efficient Clustered Data Dissemination Based Routing in D2D Collaborative Vehicular Networks	307
<i>Shital Y. Gaikwad, G. Anjaneyulu, Dalia Al-Tarazi, M. Rama, Vivek M. Korde, Kaniga Perumal</i>	
Hybrid ACO and PSO Optimization Based Routing in Vehicular Networks Using VanetMobiSim and NS2	313
<i>KST Guru Raj, Syed Shahada, Joel T, Ibrahim Mohd Ahmad Mansour, Ajay S Bonde, Kaniga Perumal</i>	
Experimental Analysis of Road Surface Deformation Quantification Based on Unmanned Aerial Vehicle Images	320
<i>Vimal Raja Gopinathan, Yarlagadda Shailaja, Ibrahim Mohammad Ahmad Mansour, D. Sharada Mani, Narendra J Giradkar, Kaniga Perumal</i>	
A Novel Internet of Things (IoT) Enabled Women Safety System Design with Emergency Alert Mechanism	329
<i>P. Shyamala Bharathi, T. Judgi, D. Pradeep, Arulananth T S, Ahmad Abdelhafiz Ali Samhan, J Giri</i>	
A Novel Approach to Perform Mouse Operations Virutally by Using Intelligent Hand Gesture Recognition Methodology	336
<i>T. Suneetha, K. M. Rayudu, Amneh Alamleh, Manish Dakhore, C Ravindra Murthy, G. Dhanalakshmi</i>	
Experimental Evaluation of Artificial Intelligence Powered Smart Bus Ticket Generation System Using Internet of Things and RFID	345
<i>P. Shyamala Bharathi, Arulananth S, D. Pradeep, T. Judgi, Maram Y. Al-Safarini, J Giri</i>	
Nonlinear Integral Equations in Modeling and Simulation of Electromagnetic Fields	354
<i>V. Krishnan, Vinodkumar K, Manju Sangwan, Vikram Nattamai Sankaran, Sivakumar S</i>	
Implementation of IoT-Enabled Smart Devices for Real-Time Health Monitoring in Nursing Practice	361
<i>Shubha Jain, Shuvo Dutta, Md. Faisal Mahmud Alvi, Anjum Abbasi, Vettrivel Arul, Harish. S. S</i>	
Flood Forecasting Model Using LSTM-Neural Network-Application and Challenges	368
<i>Chitaranjan Dalai, Arun Elias, Goutham Kacheru, Purba Das, Ashif Mohammad, N. Chidambararaj</i>	
Multimodal Collegiate Vocabulary Instruction Employing Hypermedia	374
<i>Deepa Rani, Sandip H Patil, Sugandha, Ruchi Rani, Jasneet Kaur, S. P. Vedavalli</i>	
Geospatial Analysis of Land Use Changes and Its Implications on Agricultural Production	381
<i>Marneni Divya Sree, Vani Sarada, Shashank Kishor Singh, Priyadarshini. V, S. Sahaya Vasanthi, Balasubramanian. V</i>	

Experimental Analysis of Improved AODV Protocol with Automatic Route Guidance Method in Vehicular Communication	388
<i>E D Kanmani Ruby, Bilal Al-Nassar, G D Vignesh, Nilesch Gedam, Ganekanti Naresh, N Nagaraju</i>	
Statistical Methods for Big Data Analysis in Technological Systems	394
<i>Abas Hidayat, Ari Nurfikri, D Vamsi Priya, Rajendra V. Patil, Vaishali Raghuvir Hire, Nishant. S</i>	
Fog and Edge Computing: Bridging the Gap Between Cloud and IoT	401
<i>Basavaramanjaneyulu Gudivaka, Nilesch Anute, Yogesh Ramaswamy, Vikram Nattamai Sankaran, Rajendra V. Patil, Jeyaprakash. N</i>	
The Impact of Internet of Things (IoT) on Legal Liability and Regulation.....	408
<i>Ch. Venkata Krishna Reddy, Kampa Kishore Kumar, Richayadav, Sarvagya Jha, Ashish Kaushik, Siva T</i>	
Data-Driven Approaches for Crop Yield Prediction Using Machine Learning Techniques	415
<i>S. Sundararajan, Ningaraj Belagalla, Omar Isam Al Mrayat, Muhammad Saqib, Shubham Malhotra, Jayabharathi P</i>	
AI-Driven Threat Detection Models: Integrating Deep Learning for Enhanced Cybersecurity Against Emerging Network Vulnerabilities.....	421
<i>Lalit Kumar, Abdullahi Modibbo Abdullahi, Omar Isam Al Mrayat, Yogesh Ramaswamy, Vikram Nattamai Sankaran, Jayabharathi P</i>	
Experimental Evaluation of Pancreatic Cancer Identification Based on CT Images by Using Intelligent Deep Learning Procedure.....	428
<i>Ramachandran. R, J. Anvar Shathik, J. Sivakumar, P. Manothini, G. S. Jackulin Asha, M. Venkatanares</i>	
An Innovative Dynamic Error-Compensation Design for Fixed-Width Square Utilizing Improved Booth-Folding Protocol.....	437
<i>K Jaya Krishna, Nidamanuri Srinu, S Selvalakshmi, K. Sujatha, Ganekanti Naresh, G. Dhanalakshmi</i>	
Efficient Broadcast Algorithm with Optimal Placement in RFID in Vehicular Adhoc Networks	446
<i>Jala Prasad Rao, B. Thyla, G. B. Santhi, N Vijayaraghavan, G D Vignesh, Sasirekha. D</i>	
Traffic-Aware Clustering and Optimal CH Selection Using Lion Optimization in Vehicular Ad Hoc Networks	452
<i>U. Prasad, L. Chithra, Ch. Mastan Chowdary, I M A Mansour, S Bagde, Pgv. Ramesh</i>	
BEE Optimization-Based Model for Reliable with Resource Allocation in UAV Guided Vehicular Communication	459
<i>Sadasivam Subbarayan, T. Chandra Sekhar Rao, Rajalakshmi S, B Rama Devi, Osama Jamal Jamil Abed Al Jawad, Yogesh Y. N</i>	
Link Prediction with Efficient and Reliable Routing Using Bat Algorithm in UAV-Assisted Vehicular Network.....	466
<i>Sk. Asif, Kiruthika. B, K Ramanjaneyulu, O J J Abed Al Jawad, M Dakhore, Pgv. Ramesh</i>	
Energy Efficiency Improved Grey Wolf Optimization Algorithm in Software-Defined Vehicular AdHoc Networks.....	473
<i>D Sameer Kumar, Radhamani. V, M. Muthamizh Selvam, Abla Suliman Hussein, N Gedam, G. Vinoth Rajkumar</i>	

Efficient Communication and System Model for Delay Minimization in UAV-Assisted IoT Networks	479
<i>Sangeetha V, N. Janardhana Rao, V. Subashini, Rajasekhar Manda, Amneh Alamleh, Shilpa Bhimrao Sahare</i>	
An Efficient Clustering Approach Broadcast Scheduling Process in Heterogeneous Vehicular Communication	486
<i>S. Vamsi Ujwala, M. Venkatanaresh, V Jai Kumar, Amneh Alamleh, Prasad A Hatwalne, M Senthil Murugan</i>	
Design and Implementation of Propagation-Based Clustering Approach to Improve the Efficiency in Vehicular Sensor Network	493
<i>Shital Y. Gaikwad, B. Sabharinadh Reddy, M. Swarna, P. Sri Haritha, Bilal Al-Nassar, Prashant D. Kamble</i>	
Efficient Stable Cluster Management Model for NDN Heterogeneous Vehicular Ad Hoc Networks.....	500
<i>Chakravarthi Bachina, Narasimham Anil Kumar, Sk. Sheema, Bilal Al-Nassar, Ashvin B Amale, Senthil Murugan M</i>	
Intelligent Emergency Communications Using Efficient Clustering Based Routing Strategy in Unmanned Aerial Vehicle Networks	507
<i>K. Nagamani, V. Sujatha, M Praveena, Aba Suliman Hussein, R Adakane, Suresh D</i>	
Improved Urban AODV Routing with Distributed Semi-Clustering Protocol for Vehicular Adhoc Network.....	514
<i>Ch. Bhanu, S. Sugumaran, M. Senthil, A S Hussein, Alok Narkhede, K. Kausalya</i>	
Leveraging Hybrid Resnet-Gru Model to Analyze the Impact of Personal Interests and Family Influence on Career Path Decisions Through Professional Identity	521
<i>Dong Xinxin, Azadeh Amoozegar, Pee Wen Hui</i>	
The Dual Impact of Hybrid Deep Learning Models: Exploring the Role of Stara Awareness in Mediating Employee Innovation in AI-Integrated Workplaces	526
<i>Ma Xinchun</i>	
Enhance Path Selection with Multi-Hop Data Dissemination to Achieve High Quality-Of-Service in Vehicular Communication	533
<i>Y Shasikala, V. Chinnammal, Maria Rubiston. M, Imad Shalout, Prashant D. Kamble, M. Dinesh</i>	
Utilizing Hybrid Inception-Transformer Model: An Innovative Framework for Exploring University Choice Influences from Social Contributions and Stakeholder Perception	540
<i>Hao Wenjing, Azadeh Amoozegar, Pee Wen Hui</i>	
A Robust and Efficient Private Server Creation in UBUNTU Environment.....	549
<i>K. Gowsic, R. Ramya, M. R. Saranya, S. Sathasri, T. Srigeetha</i>	
Artificial Intelligence in Robotics: Revolutionizing Industrial Automation and Beyond.....	557
<i>Chamandeep Kaur, Awatef Balobaid</i>	
Cost-Efficient Self-Controlled Automated Home Management System in the IoT Context.....	564
<i>Rubesh Kumar. T, Hani Attar, R. Sankar, J. Sivakumar, M. Dinesh, Shilpa Bhimrao Sahare</i>	
Hybrid Deep Learning Approach for Image Captioning: Integrating ResNet50 and GloVe with LSTM	571
<i>Dhakshana Moorthy, R. Deepa</i>	

Future Frame Predictor for Oceanography	579
<i>Dhino Williams D, Infant Luvango P, Bino J</i>	
Segmentation and Evaluation of Breast Cancer in Ultrasound Images: A Study with UNet Models	585
<i>Syed Masooma Ali, K. Vijayakumar, A. Subasini, S. Prabha</i>	
Drone Base System for Management of Electrical Infrastructure Damage in Disaster Areas.....	591
<i>Gottumukkala Nithish Surya Varma, Mallarapu Akhil, S. Radhika</i>	
AI-Driven Analysis of UV-Induced DNA Damage and Melanoma Risk Assessment.....	600
<i>Akash Vira J, Dhanush N, Sri Ram K. P</i>	
Design and Implementation of a Low-Power 4-Bit Synchronous Up Counter Using Gate-Diffusion Input Technology	608
<i>Senthil Murugan M, Tharasi Sandhya, T. Siva, Venika R J</i>	
Design and Optimization of a Low-Power Phase-Locked Loop Using 18nm FinFET Technology for High-Performance Applications	617
<i>Senthil Murugan M, Varsha M, D. Suresh, Sri Ranjani G</i>	
Optimised State of Charge Estimation for Battery Using ML Technique.....	626
<i>Aravindharaj. R, Athiniraj. K, T. V. Narmadha</i>	
Agribot -A Multifunctional Autonomous Robot for Enhanced Agricultural Efficiency and Precision Farming	635
<i>Sreekanth R, Ramesh Babu M, Aiswarya T S, Harini N</i>	
Design and Analysis of Microwave Filter for Sub-6GHz 5G Applications.....	642
<i>Shanthini S, Sharmila Devi S B, Siva T, Mohan C, Senthil Murugan M., D. Suresh</i>	
Sea Buoy in Oil Spillage Detection	646
<i>Jayarama Pradeep, Jyothirmye B, Madhumitha S</i>	
Utilizing Digital Technology for Accurate Water Footprint Calculation in Agricultural Products	655
<i>Kabilan Rajagopal, Harisha Ayyavoo, Aarthi Selvam, Mahalakshmi K</i>	
CNVIS-Net: A Self-Attention Framework for Predicting Soil Nutrients from Hyperspectral Data	662
<i>Shagun Jain, Divyashikha Sethia, Kailash Chandra Tiwari</i>	
Classification of Benign/Malignant Digital Mammogram Images Using Deep Learning Scheme	670
<i>K. Vijayakumar, Mohammad Nazmul Hasan Maziz, Mathiyazhagan Narayanan</i>	
Chatbots and Customer Service: Exploring the Impact of AI on Customer Satisfaction and Brand Loyalty	676
<i>Ram Kumar Dwivedi, Yogesh Kumar</i>	
AI-Powered Predictive Analytics in Financial Forecasting: Implications for Real-Time Reporting Adoption.....	682
<i>Zaid Ali Obaid, Ameer Saheb Shaker</i>	
Artificial Intelligence in Sustainable Investment: A New Frontier for High-Net-Worth Investors	691
<i>Sweta, Ajay Pratap Yadav</i>	
A Novel Approach to Identify Disfigured Faces Using Facial Landmark Detection.....	701
<i>R. Vidhyasri, Vruthi. V. Anand, N. Nanthini</i>	

Advanced Data Extraction and Predictive Analytics for Hemodialyzers Using AI and OCR.....	707
<i>Espin Shalo S P, Jeeshan R J, S Gunasekar, Pius Agbulu G, Sairam V A</i>	
Efficient Mixed-Radix FFT Architecture for High-Performance Communication Systems.....	713
<i>Viswanathan T, M. Malathi</i>	
Tuberculosis Detection in X-Ray with Two-Fold Training and Fused Deep Features Based Classification.....	720
<i>Syed Mohammad Kamal Zaidi, Mohammed Shahjahan Kabir, G. Mahalakshmi, V. Rajinikanth</i>	
Effective Feature Technique for Heart Disease [FETUS] Prediction in Machine Learning.....	726
<i>Shabana Asmeen Mj, Srishakthi Sr, C. Ramadevi, Narmadha T V</i>	
Automatic Detection of Happy/Sad Face Images with DL-AN Analysis.....	732
<i>Syed Mohammad Nihal Bin Syed Waseem Zaidi, Lubna Shirin, S. Hemalatha, Mathiyazhagan Narayanan</i>	
Improving Classifier Performance on Imbalanced Software Defect Datasets Using Resampling Techniques.....	738
<i>Talari Nandeesh, Ashu Mehta</i>	
Diabetic Retinopathy Detection in Retinal OCT Images with Fused ResNet Features	746
<i>Nuzha Basheer, B. Senthilnayagi, Mathiyazhagan Narayanan, Illavarason P</i>	
Impact of AI on Auditing: Transforming Assurance Services in the Digital Age.....	752
<i>Anmar Noori Dawood, Akeel Almagtome</i>	
Deep Reinforcement Learning for Dynamic Compliance Management in Blockchain Supply Chains: A CNN Perspective.....	760
<i>Hussein Ahmed Dheya, Alaa Bakir Raheem, Adalet Mahammad Tofiq, Azad Salh Nader, Saoud Chayid Mashkoor, Abdel Mohsen Abdel Sarhan, Mohammed Salim, Imad Al-Din Hussein Al-Saidi</i>	
Analysis of Green Human Resource Management Recruitment Multidisciplinary Approach Artificial Intelligence Systems	765
<i>S. Usha, L. Manjunath, S. Kumares, P R Kumuda, M. Yasotha, V Revathi</i>	
The Future Role of Artificial Intelligence and Internet of Things Smart Green Homes Buildings	771
<i>Veeranjaneyulu I, Radhamani K, S. Saranya, Bhukya Shankar, M. Tamilselvam, S. Venkatachalam</i>	
Revolutionizing Agriculture: Smart Irrigation Systems for Optimized Water Management and Enhanced Crop Yield.....	776
<i>S. Durai, Rajkumar N, Darsh Chatrani, Kishore Kumar K, T Vaishnavi, S Vikas</i>	
Guardianseps: Empowering Early Sepsis Detection	781
<i>K Antony Kumar, S Nireesh Kumar, Jerlin Francy Rajan, Charan Appala, Shreya Balurgi, Praveen Royal Balaiahgari</i>	
Automatic Detection of Breast Cancer in Ultrasound with Deep Learning Models.....	790
<i>K. Vijayakumar, Mohammad Nazmul Hasan Maziz, S. Prabha</i>	
Hybrid Wind Solar Energy System Optimization.....	796
<i>Srinivasa Acharya, Menda Sai Prasad, B. Srikanth, D. Vijaya Kumar, Kalyana Kiran Kumar</i>	
Normal/Stone Renal CT Slices Detection Using Deep-Learning with Ensemble Features.....	803
<i>Ramya Mohan, Venkatesan Rajinikanth</i>	

AI and ML in Genomic Research: Unlocking the Potential of Precision Medicine	809
<i>Otamurod Muminov, Sherzod Muradov, Davlatshokh Numonov, Elnara Ibragimova, Azamat Norjigitov, Dilshod Yusupov</i>	
Building a Single-Phase Grid-Tied Inverter with Maximum Power Point Tracking (MPPT)	819
<i>Tarra Ramjee, Kalyana Kiran Kumar, Sri Challa Krishna Rao</i>	
The Literary Cyborg: Exploring Human-Machine Relationships in Literature	827
<i>Muhammad Rohmadi, Kundharu Saddhono, R. Kunjana Rahardi, Andri Pitoyo, Wahyudi Rahmat, Ade Mulyanah</i>	
Stock Market Analysis and Price Prediction	837
<i>Rahul S, Shrinivas V N, Brindha G, Karthikeyan M V</i>	
AI-Driven Business Transformation: Leveraging Machine Learning for Enhanced Decision-Making	843
<i>Jairaj J Sasane, Arvind L Burande, Sanket Charkha, Dhanajay M Jadhav, Vijay Dhole</i>	
Detecting Crop Pathogens with Convolutional Neural Networks	852
<i>Sudha K, Soorya Prakash D, Sanjay Vishnu M</i>	
PerfBoost-Net: A ResNet-Capsule Framework for Analyzing the Impact of AI Tools on Construction Workforce Productivity and Satisfaction	862
<i>K Kiruthiga, K Vijaya Bhaskar Raju, R Venkatakrishnaiah</i>	
The Machine as Author: Examining AI's Contribution to New Literary Genres	871
<i>Ani Rakhmawati, Kundharu Saddhono, Maryelliwati, R. Kunjana Rahardi, Sultan, Andri Pitoyo</i>	
SatisStruct-Net: A Deep Learning-Based Framework for Evaluating Job Satisfaction and Performance in the Digital Transformation of Construction	881
<i>K Kiruthiga, K Vijaya Bhaskar Raju, R Venkatakrishnaiah</i>	
Smart Food Calorie Prediction: Hybrid CNN-ML Model for Accurate Meal Tracking	891
<i>K. P. Senthilkumar, S. Thenappan, Madhumitha J, R. Alarmelu Mangai, Rajkumar Chadge, Khaled Al-Qawasmi</i>	
Obstacle Detection and Avoidance in Self-Driving Cars using LIDAR and Vision-Based Algorithms	899
<i>A. Sujin Jose, Mohammad Bdair, Preetish Kakkar, T Praveena, S. Thenappan, S Lalitha</i>	
Enhancing Teleoperation of Mining Vehicles: Design and Implementation of a Robust User Interface for Improved System Performance	907
<i>Gomathi T, Aranganathan A, Sivasundarapandian S, Vedanarayanan V, Sakthi Prabha R, Jerrin Simla A</i>	
High Precision Star Tracker with Dynamic Post-Calibration Framework	914
<i>Salna Joy, Siddharth Rajesh, Vinayak S Bangarshetar</i>	
Identify and Analyze the Healthy and Unhealthy Food Items Using Deep Learning	921
<i>M. S. Roobini, Anjali G, Sonia Jenifer Rayen, Scinthia Clarinda, M. Nafees Muneera</i>	
Revolutionizing Military Operational Awareness and Intelligence Gathering Through the Integration of Advanced Internet of Things (IoT) Technologies	927
<i>Sakthi Prabha R, Jerrin Simla A, Gomathi T, Aranganathan A, Sivasundarapandian S, Vedanarayanan V</i>	

Prediction of Early Floods Under Indecisive Weather Forecasts Using Innovative K Nearest Neighbor.....	933
<i>T. N. Navya, G. Ramkumar</i>	
Optimized Diabetic Retinopathy Eye Disease Classification Using Deep Learning Model	940
<i>Thirisha A, G. Ramkumar</i>	
HCNCS: An IoT Based Logical Real-Time Weather Data Analysis to Predict Air Quality by Using Hybrid Convolutional Neural Classification Scheme.....	947
<i>D. Menaka, K. S. Subhashini, S. Kalyani, L. Anju, M. K. Varadarajan</i>	
Sentiment Vectorization and Predictive Modeling of Aviation Feedback Using Advanced NLP Architectures	956
<i>Vansika Sonthalia, Yatindra Pabbati, Panya Sharma, R. Nithya Paranthaman</i>	
The Role of Machine Learning in Revolutionizing Business Automation and Efficiency	966
<i>Gajendra Kumar Gupta, Sameer Rastogi, Vivek Kumar Mishra, Neha Singh, Mohd. Salahuddin Ansari, Mithilesh Kumar Tyagi</i>	
Sustain Wise: A Cross-Cultural Artificial Intelligence Model for Predicting Eco-Conscious Consumer Behavior in UAE Hospitality	976
<i>Sarwat Jahan, Tajwar Hussaini, Syed Waqar Haider, Amit Verma, Afseer Majeed, Sidra Abid</i>	
Tokenizing Literary Assets: Blockchain Applications in Intellectual Property Management.....	985
<i>Kundharu Saddhono, Andri Pitoyo, Nada Afra, R. Kunjana Rahardi, Ida Yeni Rahmawati, Nur Agus Salim</i>	
An Improved Design of Wearable Sensors Assisted Personal Health Monitoring Device Based on IoT Technology.....	994
<i>P. Prince, C. Rajabhushanam</i>	
Analysis of 6T, 7T, 8T SRAM Cells Using FinFET at 7nm Technology	1002
<i>Neerajaksha Monish, Sritama Roy</i>	
Intelligent LoRa Powdered Patient Monitoring Approach Based on Internet of Things Technology	1008
<i>P. Prince, C. Rajabhushanam</i>	
Enhancing Education Infrastructure Through Machine Learning: A Framework for Classifying and Prioritizing Schools	1016
<i>S Ujjain, Sv. Akash, Ishwar D Dhanush, V. Thilak Kumar</i>	
Experimentally Evaluate the Social Media Utility Based Purchase Power Parity (PPP) Using Artificial Intelligence (AI) Powered FinTech Assisted Analytical Framework for Consumer Financial Insights	1021
<i>Valliappan Raju</i>	
An Enhanced Framework for Intrusion Detection System Using LSTM.....	1030
<i>Jyothisna K, Hemamalini V</i>	
Machine Learning for RSA Cryptanalysis: Assessing Key Strength.....	1038
<i>Thirunavukkarasu J, Vivek Subramanian G, Kirthana Mohan R, Janavi Thiyagarajan, R. Sethuraman, Korimilli Yash Venkat</i>	
Cryptography and Steganography for Data Hiding in Images: A Novel Architecture and Implementation.....	1047
<i>Satya Phani Krishna Sastry Jonnalagadda, Shanmukhi Achanta, Sai Praneeth Arava, Venkata Ganesh Avvaru, Siva Satya Sreedhar P</i>	

Efficient FPGA Implementation of a High- Performance, Low-Complexity LDPC Decoder for Next-Gen Communication Systems	1055
<i>M. Paramaiyappan, S. Palanivel Rajan</i>	
Deep Learning-Driven Adaptive Band Selection for Efficient Hyperspectral Image Analysis	1064
<i>Sravanam Sreeja, Thatikonda Radhika, M. Ramya, S. Navaneethan, R. Shankari, C. R. Bharathi</i>	
Predictive Modeling Using Glacier Volume and Depth Estimations with Advanced Statistical and Deep Learning Techniques	1072
<i>Divya Sumithra Madiri, M. Sobhana</i>	
Weapon Detection Using Region-Based Convolutional Neural Network (RCNN).....	1080
<i>Jyothirmayi Desu, Venkata Abhishek Chigulla, Karthik Sai Chittibomma, Mounika Ayinapuru, Siva Satya Sreedhar P</i>	
A Logical Evaluation of Exploiting Financial Scope Assessment Based on Social Media Analytics Using Deep Learning Assisted FinTech Framework for Digital Financial Profiling.....	1087
<i>Valliappan Raju</i>	
DelamPredict-X: An Ensemble Learning-Based Approach for Evaluating Delamination in Jute Fiber Reinforced Materials.....	1095
<i>Karthikeyan R, Madhu S</i>	
Online Exam Fraud Detection Using Different Techniques	1104
<i>Jayabharathi P, Vinoth Kumar S, Vijay Rajasimman R</i>	
Advanced CNN-LSTM Edge-Computing in Epilepsy Wearables for Real-Time Seizure Detection and Extended Battery Life.....	1112
<i>S. Sridevi, D. Pravin, P. Sivasankar Rajamani, V. Srinivasan, P. Loguprasath, N. Tharun</i>	
Optimizing Supply Chain Management with Machine Learning Algorithms	1118
<i>Khanidh V. Vernekar, Amit Aggrawal, Sagar Pawar</i>	
Cross-Platform Marketing Strategies Using Reinforcement Learning to Maximize Multi-Channel Engagement	1128
<i>Joseph Mary Rahila, D. Revathi, R. Nadanasabai, S. Chandrasekaran</i>	
A Scrupulous Liver Cancer Segmentation: An Enhanced U-Net Model with Extended Echo Skip Based ResoReplicate Layer	1136
<i>Viveka S, Prabhuranjith P, Madhubala. C, K. Hemalatha, A. Ramya, N. G. Gayathri</i>	
Smart Parking System for Educational Organization	1144
<i>Ayush Shah, Md Abdur Rahim Shezan, Sandeep Kumar Dash, B Nageswara Rao</i>	
Urban Vs. Rural Crime Dynamics: A Spatio-Temporal and Machine Learning Approach for Comparative Analysis.....	1151
<i>A. Maheshwari, Maria Emilia Camargo, Mithileysh Sathiyarayanan, Walter Priesnitz Filho</i>	
Energy Demand Forecasting in an Integrated Power System Using Machine Learning Techniques	1161
<i>Vijaisrinivaas Amc, H. Prasad, Vigneshwaran P, T. D. Sudhakar</i>	
5G and Beyond: Evolution of Wireless Communication Technologies.....	1169
<i>Issam Trrad</i>	
Enhanced Waste Segregation Using Vision Transformers and YOLO	1178
<i>Sumathy G, Maria Emilia Camargo, Walter Priesnitz Filho, Mithileysh Sathiyarayanan</i>	

Predicting Disease Outbreaks with AI: An In-Depth Analysis of Infectious Diseases Surveillance	1185
<i>Ankit Kumar Dubey, Khushbu Gupta, Venkatesan S, Abhilasha Sankari, Siva Sankar Namani, Raavi Hemalatha</i>	
Safe-Smart Navigation System Using Machine Learning and Satellite Imaging	1192
<i>Sambath M, Ankit Singh, Nisaj Ravin Patel, Ilinda Joseph</i>	
Modeling and Simulation of Hybrid Renewable Sources for Stand Alone AC Loads	1200
<i>Praveenkumar. K, Sanjai. S, Anbarasan. P</i>	
A Novel Multisource Multilevel Inverter Using Minimal Switches for Renewable Energy Systems	1205
<i>Ms Sathya Agila S, V Thiagarajan</i>	
Enhancing Cybersecurity in IoT-Based Banking Systems Using Artificial Intelligence	1213
<i>S. Thandayuthapani, Pradip Chakraborty, Pritha Mukherjee, G. Pandi Selvi, Sarfaraz Javed</i>	
Prediction of Humidity Based on CEEMDAN-LSTM Approach	1219
<i>Daphin Lilda S, Jayaparvathy R</i>	
Early Detection and Classification of Cardiac Ventricular Arrhythmia	1226
<i>Rahema Naaz, Shafeeq Ahmad</i>	
Ddos Detection in Mitigation Using Deep Learning with Cyber Security	1232
<i>R. Savithiri, K. Pradeep Mohan Kumar</i>	
Smart Management of Crop Monitoring Using Drone Technology	1239
<i>George Fernandez I, Yashwanth G M, Gopal Sharma R Joshi, Sangamesh Lingshetty, Rakesh Prabhugowda Gowdra, Mohammed Arif</i>	
Quantum-Resistant Cryptography for Securing Future Cyber Threats	1246
<i>Shantanu Sudhir Gujar</i>	
Analyzing the Impact of Big Data on Curriculum Design and Student Performance in Secondary Education	1252
<i>Yousef Jaber Jamel Alawneh, Abdel Khaleq Issa</i>	
AI-Assisted Theorem Discovery: Revolutionizing Mathematical Exploration	1262
<i>Yuli Bangun Nursanti, Imam Sujadi, Ira Kurniawati, Arum Nur Wulandari, Riki Andriatna</i>	
Design and Implementation of an Automated Seed Sowing Robot with Precision Irrigation and Environmental Monitoring for Smart Farming	1272
<i>Narean R, Pranav S, Dankan Gowda V, Nithin Ar, Pratik P Pujari</i>	
EcoTrack: AI-Powered Smart Waste Management System	1280
<i>Surya R, Subhikshni V S, J Kasthuri, R S Shanmuga Sundaram</i>	
AI in Supply Chain Optimization for E-Commerce	1285
<i>Sunil Patel, Bhagvanbhai Madhabhai Karnavat, Vinit M. Mistri, Chiragkumar B. Rathod, Chirag Rasikbhai Patel</i>	
Improving Decision-Making in Retail: Employing DBSCAN Algorithm for Enhanced Customer Segmentation in Mall Environments	1290
<i>Lavanya. M</i>	
DeepFuseNet: A Novel Multimodal Biometric Authentication Model with Deep Neural Networks	1295
<i>K. Appasamy, R. S. Shanmugasundaram</i>	

Exploring and Validating Key Components Enabling Context-Based Dynamism in Chatbot Architectures	1303
<i>Kamal Gulatl, Bhuvan Unhelkar, Ravish P. Y, S. Kishore Kumar, Vaibhavi Chavan, Harikumar Pallathadka</i>	
SIGMO: Sigmoid Colon Cancer Prediction Using Machine Learning and Deep Learning	1309
<i>S. Dhivya Dharshini, K. Anand</i>	
Design and Implementation of a Battery Management System with Charge Monitoring and Fire Protection for Electric Vehicles	1317
<i>Karthika M, R Puneeth Kumar, Uday A Kammar</i>	
EM-DR: Efficient-Mamba Vision Model for Early Detection and Classification of Diabetic Retinopathy	1324
<i>Santhosh M, Sam Varghese George, Surendhan A, Sukin Raj M, Arisuthan C</i>	
Analyzing the Influence of ChatGpt and Google Bard AI in Education and Industry: A Comprehensive Assessment	1333
<i>Ella Gorian, Venkata N Inukollu, Sagar H Mohite, Ashim Datta, V Jagadish Kumar, Swapna Patker</i>	
Performance Analysis of Circle Search Algorithm-Based MPPT for Solar in Fuzzy Controlled Distributed Voltage Regulation of a Remote Microgrid	1339
<i>Jeganthan R, Gopi Krishna C, Umesh Prabhu H</i>	
Design and Analysis of Power Management Systems in Automotive Applications Using Basic Non-Isolated Converters	1348
<i>Angeline Brittnee Fernando, William Christopher I, Chandani I</i>	
Intelligent Traffic Signal Optimization and Vehicle Counting Using Canny Edge Detection and YOLOv8 Model	1356
<i>Manoranjitham R, Vimalraj B G</i>	
House Price Prediction Using Regression in Machine Learning	1365
<i>G. Veena Madhuri, A. Ajay Kumar, Md. Asrar Hussain, Nss Girish Kumar, M. A. Jabbar</i>	
Satellite Based Geographical Poverty Prediction	1371
<i>Vividh Salankimatt, Renuka Devi M N, Yashas M, Vivek D K, Vijay Kumar K S</i>	
Concurrent Fusion LSTM Model for Accurate Prediction of Covid-19 Progression Using Multi-Source Data	1378
<i>Parthiban M, Anna Alphy, B Sreedevi</i>	
Evaluating Cybersecurity Compliance Through Legal Jurisprudence: A Machine Learning Approach to Predicting Court Decisions	1387
<i>Annu Khan, Komal Audichya</i>	
Experimental Study on Sound Wave Analysis Using Active Noise Cancellation Techniques for a Helicopter Cabin Model	1393
<i>Sarweswaran Rajangam, Krishna Teja K S, P. Yashasvi Chandrakant, Rushee Kumar A, Sathish S, Seralathan Sivamani</i>	
Design and Analysis of BLDC Motor for Electric Two Wheelers.....	1400
<i>R. Amartyasen, M. Balaji, S. T. Vigneshwar</i>	

Design and Implementation of 21 Level Asymmetrical Multilevel Inverter with Reduced Number of Components	1407
<i>P Sumaithri, Shruthieshreyaa R, V. Thiyagarajan, Sri Vidhya J</i>	
Enhancing Cybersecurity with AI: Anomaly Detection in Network Traffic.....	1413
<i>V. Kavitha, S. Malathi, Vishnu Priya P M, Saranya Ekambaram, B. Charith, M. Deivakani</i>	
Enhancing Green Marketing Strategies with Reinforcement Learning for Dynamic Product Design	1419
<i>R. Vijyakumar, A. Geetha</i>	
Cybersecurity in Healthcare: Safeguarding Patient Data in Telemedicine Platforms.....	1427
<i>Chandravadhana S, Narendran M, Banu S, Rahmaan K, Anurag Reddy Ekkati, Venkateswara Rao Jallepalli</i>	
Impact and Efficiency of E-Learning Platforms in Transforming Teachers and Students Skills.....	1434
<i>Rajeshkumar C, K. Rajakumari</i>	
Deep Learning-Driven Preference Models for Biomedical Image Retrieval Systems	1442
<i>Linges. M, N. Shanmugapriya, Sakthikumarasamy. R, Roshan Devassy T. P</i>	
IoT-Enabled ML Framework for Efficient Biofloc Monitoring in Aquaculture	1450
<i>Chalapati Mounika, P. Vinayagam, M. Kanimozhi, Helina Rajini Suresh, Neeraj Sunheriya, Ayman Amer</i>	
Machine Learning Models for Identifying at-Risk Students: Applications and Challenges in Higher Education.....	1458
<i>Guli Toirova, Alijon Kosimov, Mavluda Fayziyeva, Kazbek Topvoldiev, Tursunay Yusupova, Dilshod Turdaliev</i>	
Optimizing Data Gathering in Internet of Things Networks: Discrete Optimization and MEC Offloading for Industrial IoT	1467
<i>B. Padmavathi, Jayanthan B S, Pooja Sree H, Hariharan M S, Nithish S, Ramkishore E</i>	
IoT-Enabled Wearable for Continuous Elderly Health Monitoring and AI-Based Emergency Detection	1474
<i>Surya U, Ben Stanes J, Calvin Davis S R</i>	
AI-Enhanced Predictive Control in Power Electronics	1483
<i>Ramanathan G, M. Senthil Kumaran, H. Mickle Aancy, U. Rajesh Kumar, Jyotirmayi Purohit, S. Kaliappan</i>	
Machine Learning for RSA Cryptanalysis: Assessing Key Strength.....	1490
<i>Thirunavukkarasu J, Vivek Subramanian G, Kirthana Mohan R, Janavi Thiyagarajan, R. Sethuraman, Korimilli Yash Venkat</i>	
Mediation Toxicity for Casting Using Deep Learning.....	1499
<i>J. Dafni Rose, J. M Joel Staines, Khalushankar A</i>	
Automated Metro Fare Collection and Dynamic Passenger Management System	1506
<i>Nisha. M, Kavim. J. J, Anist. A</i>	
Optimized Cardiac Disease Prediction Using Cuckoo-Harmony Enhanced Convolutional Neural Networks	1514
<i>S. Jayasankari, Polaki Sujatha, R. Vinitha, Rama Prabha K. P, K. Gayathri, Bharathi Ramesh Kumar</i>	

Enhanced Decision Making Processes in Cognitive Radio Networks (CRNs) for Analyzing Spectrums Using Security Enabled Decentralized System Architecture	1522
<i>P. Shyamala Bharathi, A Shankar</i>	
Blocking Random Network Attacks and Avoiding Network Traffic in Ad Hoc Networks by Using Honeypot Network Security and Intrusion Prevention System	1530
<i>V. Ramachandran, K. Suresh</i>	
Deep Learning Technique to Extract Skin Cancer in Earlier Stage Through Optimization	1538
<i>C. Valvil Ori, J. Anish Kumar</i>	
Vehicular Cloud Computing for Enhanced Data Management in Intelligent Transportation	1545
<i>Santhiya A, S. Sujiya, Soundharyagowri S, Akshaya Salu</i>	
Deep Learning in Radiology: Challenges and Opportunities for Improved Diagnosis	1553
<i>Farida Rasuli</i>	
Adaptive Deep Learning Framework for Privilege Escalation Attack Detection and Mitigation in Cloud Environments	1563
<i>Letika. P. M, Jessica Jesseline. B, A. Jemima Havila Catherine</i>	
A Superficial Learning Approach to Detect Criminal Activities in Roadsides Using Hybrid Deep Learning Mechanism	1572
<i>Dileepkumar Padidem, Anil Bellapu, K. V. Srinivasulu, S. Thulasee Krishna, Bhuvaneshwari Jolad, G. N. R. Prasad</i>	
Cloud Vision Optimizer Framework Using Deep Learning for Efficient Resource Management in Distributed Cloud Environments	1579
<i>Ujwala Suresh Rao Junghare, Yogesh Vasantrao Hushare, Suhasini Vijaykumar Kottur, Neeraj Gupta, T. C. Manjunath, Suneet Kumar</i>	
A Novel Design of Image Based Object Recognition Model Using Enhanced Neural Classification Logic	1587
<i>Anvar Shathik J, B Ravi Chandra, M D Nandeesh, T. C. Manjunath, Swathi Pothala, Nageswara Rao Lavuri</i>	
An Effective Development of Breast Cancer Identification Methodology Using Elevated Neural Classification Procedure	1595
<i>M. Gokilavani, Rashmi K, Premkumar C D, Bhat Geetalaxmi Jairam, T. C. Manjunath, Suneet Kumar</i>	
Optimizing Diabetic Retinopathy Screening with Machine Learning: A Data-Driven Approach	1603
<i>Preethi. V, Archana. Bs, George Fernandez I, Vaishnavi P, Dhathri K</i>	
TICU-Net: MediCareVision Framework for Disease Diagnosis Using Cascaded U-Net and Transformers Deep Learning Models	1611
<i>Anvar Shathik J, Prasanna B T, Daniel Francis Selvaraj Jayapalan, Rekha. K. S, Akella Subhadra, Suneet Kumar</i>	
Secure-AI-Shield Model Leveraging Advanced Transformer Networks for Enhancing Cybersecurity in Blockchain Applications	1620
<i>Akshay Dilip Lahe, B. Saravanan, Ambrish Kumar Sharma, J. Anvar Shathik, Rashmi K, Santosh Shivrall Dhamone</i>	

Energy-Grid-Optimizer Model Utilizing EfficientNet-Inception Framework for Smart Energy Systems and Grid Optimization.....	1628
<i>Aarthi D, P V Narendra Kumar, Pallavikumari Keshavbhai Gamit, Santosh Shivilal Dhamone, P. Nagasekhara Reddy, Nageswara Rao Lavuri</i>	
Experimental Analysis of Throughput Maximization and Delay Reduction Over Wireless Sensor Network Through Neural Route Mapping.....	1636
<i>V. Sujatha, Akash R, Arvind R, Joshwa A, Likith B, Aashifa Barveen A</i>	
VisualTrackMapper: An Efficient Framework for Advanced Object Recognition Using Deep Learning Procedure	1643
<i>N. Juliet, Amman M, Balaji S, Karthick M, Arundhathi N B, Dhaarani J</i>	
An Efficient Energy Maximization Protocol Design Based on Convolutional Route Optimization Protocol	1651
<i>R. Sankar, Antony Alwin S, Deepak R, Karthik N, Geethanjali S, Jayapriya S</i>	
An Efficient Deep Learning Powered Real-Time Malware Identification Scheme Using Optimized Threat Classification Principle	1658
<i>K. Malathy, Antony Johnson M, Harish S, Kiran Kumar M, Keerthana L, Kiruthika R</i>	
An Adaptive Model for Learning Powered Traffic Sign Recognition in Autonomous Vehicles Using Neural Structure Optimization Scheme	1666
<i>R. Rajeshwari, Antony Karan David J, Jain J, Kishore Edwin S, Monisha L, Pavithra P</i>	
HealthCore: A Multi-Modal Framework to Predict Leukemia Disease Using Integrative Healthcare Image Evaluation.....	1674
<i>N. Lakshmi, Arun Prasath K, Joshua Kennedy D, Koramutla Teja Sai, Meenakshi M, Miruna B</i>	
Intelligent Energy Management System for Standalone Electric Vehicles with Adaptive PID Control and Renewable Power Sources.....	1682
<i>M Karthick Kumar, B Madhanraj, M. Ramesh Babu</i>	
Analyze, Design and Implementation of MPWM Interleaved DC-DC Converter with Voltage Doubler for EV Applications	1691
<i>Devi Priya R, Indhumathi S, M. Venmathi</i>	
Efficient Bioelectricity Generation System Using Microalgae.....	1698
<i>Nishitha D. K, T. V. Narmadha, Kumuthavalli T</i>	
Sliding Mode Controlled ReliftLuo Converter – Dual Output DC to DC Converter for Microgrid Application	1707
<i>Joshua Daniel P, Nadeen P, Venkatesh Kumar C</i>	
Real-Time Ground Water Level Detection Using Satellite Imagery and XG-Boost Algorithm for Sustainable Water Resource Management.....	1717
<i>Aravindhan K, Chidambararaj N, B. Sibhiraj, R. Srinivas</i>	
Enhanced Solar Power Utilization for EV Charging Stations Using a Reconfigurable Step-Size Fuzzy Logic MPPT Controller	1725
<i>Kiruba T A, Niranjan V, Prasadh, Sudhakar T D</i>	
Automated Multiclass Fracture Detection and Classification Using YOLO: Advancing Real-Time Diagnostic Accuracy.....	1733
<i>Praghaadeesh R, Bharathi Mohan G, Gayathri M</i>	

Efficient Closed Frequent Itemset Mining: Enhancing Association Rule Discovery with Vertical Format Algorithms	1740
<i>A. Ashraf Ali, S. Silvia Priscila</i>	
Hybrid CNN-ViT Model with Grad-CAM for Ocular Disease Detection	1747
<i>A. Ibrahim Kaleel, S. Brintha Rajakumari</i>	
Sentiment Analysis and Machine Learning in Understanding Work-From-Home Stress and Work-Life Balance Among it Professionals	1754
<i>Mohamed Shameen, A. Geetha</i>	
Intelligent Stability Detection in Smart Power Grids Using Optimized Deep Learning Models	1762
<i>J. Jeyasudha, K. Sasikala</i>	
Establishing Accurate Machine Learning Models to Support the Prediction of Prostate Cancer	1770
<i>Karthikeyan M V, Victoria Jancee B, Sakthivel M, Crispin M V, Tephillah S, Senthamizhselvi M V</i>	
Optimized SNP Selection for Rheumatoid Arthritis Using Genetic Algorithm and Arithmetic Optimization Algorithm.....	1776
<i>A. Ezhil Grace, T P Ramachandran</i>	
Smart Gas Stove with Enhanced Gas Leakage Monitoring System	1784
<i>Jayarama Pradeep, Dhyaneshwar E, Amar T</i>	
Pathway-Based Gene Prioritization and Machine Learning Approaches for Rheumatoid Arthritis Analysis	1793
<i>A. Ezhil Grace, T P Ramachandran</i>	
An Intelligent Detection System for Water Safety Identifying Foreign Organisms	1801
<i>Jayarama Pradeep, Sreekanth R, Michael Jesvin F, Parethe Thendral K P</i>	
An AI-Driven Intelligent Threat-Responsive Shard Management System ITRSMS for Adaptive Cloud Security	1810
<i>Prakash V, J. Anitha Gnanaselvi</i>	
Comparing Supervised and Unsupervised Learning Techniques for Customer Segmentation in Marketing	1817
<i>S. Thandayuthapani, Irfan Abdul Karim Shaikh, Govind Soni, Manesh R. Palav, Ashok Kumar Sahoo, Anjana C A</i>	
Deep Learning for Stock Market Prediction.....	1824
<i>D. Janis Bibiyana, V. Ramu, R. Rakesh, S. Raja, Juno Jasmine J, S. Chandramouli</i>	
Enhancing Power Quality in Smart Grids Through Machine Learning Techniques.....	1831
<i>M. Vaigundamoorthi, Mukul Kumar Singh, Ramaprabha Marimuthu, Ravichandran V, Akriti Garg, Atul Sarojwal</i>	
Steganography Using Improved Diffie Hellman Algorithm and Elliptic Curve Cryptography.....	1837
<i>Vijitha S, Anandan R, Prasanna P</i>	
Energy-Efficient IoT Solutions for Smart Cities	1843
<i>Thirunavukkarasu Mani, B. Charith, T. Venkatamuni, Vaishali M, K. Lalitha, B. Muthuraj</i>	
Quantum Cryptography in Secure IoT Communications	1850
<i>P. Ramesh, N. Saranya, Shantha Shalini K, S. Leela, Eric Howard, Balasundara Ganapathy N</i>	

Neural Networks in Electrical Power Distribution Systems.....	1856
<i>E. Afreen Banu, Chandralekha M, Ancelin L, Aparna P, Bathala Neeraja, Thamizhkani. B</i>	
AI-Powered Signal Processing in 5G Networks.....	1863
<i>Kamepalli Dharani, D. Leela Rani, P. K. Kumar, Prabakaran S, R. Balamurugan, S. K. Logesh</i>	
Neural Network Approaches to Wireless Network Optimization.....	1870
<i>J. Lurdhumary, Yashwant Kumar Parte, Ramya M, Rajendra Prasad Ch, M Jogendra Kumar, A. N. Arularasan</i>	
AI-Optimized Renewable Energy Forecasting.....	1875
<i>S. Mallikarjunaiah, Sangita Bapu Patil, M. Mallika, M. Jyothsna Devi, Kanusu Srinivasa Rao, Bhanu Chandar Yenugu</i>	
Leveraging Machine Learning to Personalize Learning and Reduce Close Book Examination Stress.....	1881
<i>Amit Dimari, Nidhi Tyagi, Zarnigor Sohibova, Nargiza Mirzaeva, Naresh Kumar Sripada, Mohit Sharma</i>	
Automatic Bus Fare Collection System Using RFID, GPS and Voice Commands	1892
<i>Anand K, Harini Praba M, Jeffrin Tania B</i>	
Medify-AI Based LLM Based Healthcare System	1899
<i>Kumar P, Shreenidhi G L, Rakesh Kumar M, Sowmiya S</i>	
Parkinson's Disease Screening with Spiral-Hand-Sketch: A Study with MobileNet and KNN.....	1908
<i>Nuzha Basheer, Mohammed Shahjahan Kabir, Mary Joseph, K. Veera Vaishnavi, R. Danuspriyaa</i>	
CSR Project Management Tool and Analytics Platform.....	1914
<i>Vinod Kumar S, Akshaya R, Balaharinath C, Kumar P</i>	
Leaf Images Assisted Potato Plant Disease Detection Using Deep-Learning with Features Fusion.....	1922
<i>Syed Mohammad Kamal Zaidi, G. Sumathi, S. Hemalatha, R. Santhosh, S. Prabha</i>	
Deep Transfer Learning Framework for Brain Tumor Detection in MRI Slices: A Study	1928
<i>Syed Masooma Ali, K. Vijayakumar, Mathiyazhagan Narayanan, Illavarason P</i>	
A Multi-Sectoral Approach to Zoonotic Disease Surveillance: Classification and Monitoring Across Animal Categories.....	1934
<i>Ramya J, Rama Parvathy L</i>	

Author Index