

# **2025 2nd International Conference on Computing and Data Science (ICCDS 2025)**

**Chennai, India  
25-26 July 2025**

**Pages 1-708**



**IEEE Catalog Number: CFP25VK9-POD  
ISBN: 979-8-3315-9669-9**

**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:	CFP25VK9-POD
ISBN (Print-On-Demand):	979-8-3315-9669-9
ISBN (Online):	979-8-3315-9668-2

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

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

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## TABLE OF CONTENTS

AI-Enhanced Detection and Classification of Banana Leaf Diseases Using SVM and CNN .....	1
<i>M. Ravichand, D. Ganesh, M. Jayaranjan, M. Sunil Kumar, B. Neelambaram, K. Varun Kumar Reddy</i>	
Multifunctional Vehicle Security System Using IoT .....	7
<i>Madhu B. G., Bindushree R, Yuhina Bariz, Pushpa Ravikumar, Chandra Naik G, Gopalkrishna C</i>	
Smart IoT and AI-Driven Physical Harassment Detection System for Enhanced Personal Safety .....	12
<i>S. Murali, J. V. Anchitaalagammai, S. Kavitha, Yogitha A, Naga Mrithula Bm</i>	
Privacy-Preserving Multi-Modal Biometric Systems: A GAN and Blockchain-Based Approach .....	18
<i>S. Shamili, G. Nalinipriya</i>	
Prevention of Cardio Metabolic Risk Using Smart Gas Analyzer.....	24
<i>N. Gomathi, P. Rekha Shanmukhi, S. Gopinadh, P. Neeraja</i>	
Utilizing Federated Learning Algorithms for Early and Precise Detection of Type 2 Diabetes Across Diverse Populations.....	30
<i>Chaduvula Sarathsainath Reddy, Mohan. A</i>	
A Hybrid Approach to Transaction Anomaly Detection: Integrating Aquila Optimization with Machine Learning Algorithms.....	36
<i>Javeed Basha, Mohan Annamalai</i>	
An Optimize Revolutionary Novel AI-Driven Historical Inscription of Low Script and Ancient Manuscript Using OCR and NLP .....	42
<i>V. Raghuraman, Senthil G. A, Geerthik S, R Mohamed Alifdeen, Surya Prakash S</i>	
Leveraging Ensemble Model to Uncover Fake User Profiles in Online Communities .....	48
<i>K Anupriya, M P Pawan Chander, Vishalraj D, Vishnu Prasad, Suryaprakash M</i>	
Comparative Analysis of Random, Grid, and Optimization-Based Hyperparameter Tuning for Feature Selection Methods on a Preprocessed Chronic Kidney Disease Dataset.....	53
<i>Subashini N. J, Pushparaj E, Venkatesh K</i>	
Advanced Deep Learning Approach for Alzheimer's Prediction and Classification .....	59
<i>Mithuna B N, Sanjay N C, Yashwanth R, Swamy K L, Chethan Naik H S, Chaitra I V</i>	
Leveraging Light Gradient Boosting Machines for Accurate Sugarcane Leaf Diseases Detection.....	65
<i>S Lakshminarayanan, Rachel Nallathamby, C Bala Subramanian, K Deepak Kumar</i>	
AI-Driven Real-Time Driver Drowsiness Detection for Safer and Sustainable Transportation .....	70
<i>M. Jagadeesh, Sunkari Abhiram, B. Sai Tarun</i>	
Smart Communication Aid: An AI-Driven Sign Language Converter Using ASR and NLP .....	76
<i>M. Jagadeesh, Pranav Srivastava, Krrish Garg</i>	
AI Care Hub: Multi-Disease Detection Albinism, Brain Tumor, Malaria, and Lung Disorders Using Lightweight Machine Learning .....	82
<i>R. Roselinkiruba, Kuchipudi Vijay, Gunturu Mallikharjunarao, Mallela Gnaneswar, Sharmila L, M. Misba</i>	

Privacy-Centric On-Screen Activity Federated Learning and Attention Scoring in e-Learning.....	88
<i>Theerthesha N O, Kruthik B, Dheeraj Gowda M D, Akash H R, Chandan A B, Raghuramegowda S M</i>	
Intravenous Fluid Monitoring and Control System.....	94
<i>Theerthesha N O, Manikanta Naik, Veerabhadrachar D S, Siddarth H M, Sanjay Yathish, Madhu B G</i>	
Video Summarization Using 2D CNN .....	100
<i>Ravikumar, Sachin Ramesh, Shakthi A, Harshith S, Shoibul Akther, Madhu Bg</i>	
Prediction of Colon Cancer and Its Stages Using Image Preprocessing and Machine Learning.....	105
<i>Keerthishree B T, K S Impana, Advi Patel Y S, Sheeghra K S, Hamsa Prakash, Bhavana D E</i>	
Hybrid Machine Learning and Deep Learning Framework for Autism Diagnosis.....	110
<i>Harisha S, Sonali M N, Subhiksha H R, Sindhu A M, Sannidhi G S, Raghuramegowda S M</i>	
Breast Cancer Analysis Using Deep Learning Techniques.....	116
<i>Shruthi G K, Jagruthi P, Shaivy S, Tejaswini K M, Harshitha D, Bhavana D E</i>	
End-To-End Recognition and Interpretive Question Answering for Ancient and Cursive Texts Using Multilevel Neural Architectures and Transfer Learning.....	122
<i>M. Aishwarya, M Ramamoorthy</i>	
Carbon Emission Prediction Using Deep Learning.....	128
<i>Pushpa Ravikumar, Keerthshree B T, Theerthesha N O, Apatha M A, Nishchitha S A</i>	
Detection of Lymph Node Metastasis Adopting Deep Neural Networks .....	132
<i>Shruthi G K, Shree Roopa C M, Nayana D E, Varshini K, Pushpa Ravikumar, Ravikumar</i>	
Securing Transactions for Elderly Individuals Using Improved Elliptic Curve Cryptography in Blockchain Technology .....	138
<i>N. Deepa, Devi T, Jaisharma K</i>	
LDA Based Feature Section for Improved Logistic Regression Classification Model for Liver Cancer Detection.....	144
<i>Devi T, Jaisharma K, Deepa N.</i>	
Exploring the Log4j Zero-Day Vulnerability: Implications for Application Security and Privacy .....	149
<i>Thirumal S, Udayakumar N, Kumar N, Saritha A, Sheela Gowri P</i>	
Identification and Classification of Diabetic Retinopathy Progressive Stages Using Deep Learning.....	155
<i>Kumar N, Udayakumar N, Saritha A, Thirumal S, Sheela Gowr P</i>	
SymptoSense: An AI Assistant with Voice Interaction and Smart Symptom Detection and Doctor-Consultation Features .....	161
<i>Puspita Dash, Madhanraj G, Premkumar B, Agathian B</i>	
Advanced Browser Security Extension for Cyber Threat Protection .....	167
<i>C. Viswanathan, Movva Gayathri, Saurav Kumar</i>	
AI-Powered Video Translation: Integrating Language Models for Seamless Multilingual Communication .....	172
<i>Anand. K, Baskar M, Saravanan R, Alamelu C, Vallikannu M</i>	

Hybrid Machine Learning-Based Intrusion Detection System for Cybersecurity in Autonomous Vehicles .....	177
<i>C. Viswanathan, G Kirthika</i>	
A Novel Approach to Feature Selection Using Correlation Coefficients and Weighted Metrics.....	183
<i>Soumitra Saha, Rakesh Kumar, Meenu Gupta, Monu Sharma</i>	
An IoT-Enabled Health Monitoring and Emergency Hospital Navigation System Using Disease Classification and Predictive Modelling.....	191
<i>S Delsi Robinsha, B Amutha, D Vanusha, Anurag Dattatraya Rege</i>	
A Generative Model for Unsupervised Detection of Cyber Threats to Mitigate Adversarial Vulnerabilities in Explainable AI Systems .....	198
<i>K. Pazhanivel, N. Poongavanam</i>	
Attendance Tracking Using Geolocation Based System .....	206
<i>Sivani Anbuselvan, Kanal K, G Balamurugan</i>	
Mitigating Vehicle Damages from Pothole on Unmarked Roads Using CNN and Reinforcement Learning .....	212
<i>Namish Vangapally, Parshi Bhavishya, M. Subramaniam</i>	
Prevention of Cyber Bullying in Social Media Using Generative AI.....	218
<i>Ajel Mathew, Sivdutt S, Balamurugan G</i>	
A Cloud Computing Framework for Intelligent IOT Networks Using AI and Predictive Analytics .....	224
<i>P. Sathyaraj, D Kalpana, T. G. Vasista, S. Muthulakshmi, G Brindha, R Karthick</i>	
Convergence of Cloud Quantum Computing, IOT, and AI for Advanced Machine Learning Applications.....	230
<i>T. Anand, Parashiva Murthy B M, Uma, Prabhu Dorai, V Sathya, Karthick R</i>	
HSRG-Net: Hybrid Swin Transformer V2 Based Framework with ResNet-50 Feature Extraction and GCN for Bone Marrow Cancer Detection .....	236
<i>V. Kumari Isukapalli, S. Gopalakrishnan, R. Dinesh Kumar</i>	
Next-Gen Document Management in Healthcare: OCR and Blockchain for Enhanced Security Data Repository .....	241
<i>R. Elavarasi, G. A Senthil, S Geerthik, B Prashanth, M Nethaji</i>	
Scholarship Recommendation System Using Analytic Hierarchy Process.....	247
<i>Ranjeetsingh Suryawanshi, Rutuja Apte, Anagha Pandit, Raghav Chandratre, Anirudha Aher</i>	
Autonomous Vehicle Suspension Systems: IOT Data Analytics with Deep Learning Models .....	251
<i>Shikalgar Niyaj Dilavar, Lakshmi Kanthan Bharathi, R Narmatha Banu, Jagadeeshwaran A, M. Jeyamungan, M. Arul Selvan</i>	
A Hybrid GCN-BERT Model for Mathematical Expression and Text-Based Query Retrieval Using Similarity Measurement .....	257
<i>Balachandralekha. S, Thangakumar. J</i>	
Ensemble Learning with Confidence-Based Rejection for Equitable Skin Disease Diagnosis Across Skin Tones .....	263
<i>Pavan Karthick T, Aditya A Nair, S. Gnanavel</i>	

Context-Aware Brain Tumour Segmentation Using Swin Transformer and Mutual Attention Fusion: A Deep Learning Approach .....	269
<i>P. Rama Rao, Sivakumar Depuru, K Amala, Sivanantham S, Shaik Wasimakram</i>	
Lesion-Feed: Adaptive Feed-Forward Network Integrated with Representation Learning for Skin Lesion Analysis and Segmentation.....	275
<i>Abdulrahman Alqarafi</i>	
Automated Hepatic Tumor Detection Using ResNet-50 and Flask: A Comprehensive Framework .....	281
<i>Thenmozhi P, Rajeshkannan S</i>	
Classification of Autistic Children from Normal Using Convolutional Neural Network with Facial Images .....	287
<i>Subash Sathya B, Jayasri Archana, Thilakavathi B</i>	
Smart Recognition System for Indian Medicinal Leaves Detection Using Swin Transformer Model .....	293
<i>M. Sanjay, Renukadevi. S</i>	
Driver Drowsiness Detection Using CNN and LSTM .....	299
<i>B. Karthikender Reddy, Patel Sai Jayanth, M. Subramaniam</i>	
Integrating Machine Learning and MediaPipe for Gym Management System Using AI.....	305
<i>Rohan Gupta, Krishnam Gupta, Chirag Pandit, Prabhjot Singh</i>	
AI-RAG: Enhancing Language Models with Real-Time Information Retrieval.....	310
<i>K. Rajesh Kambattan, Pothineni Smily Chowdary</i>	
Deep Learning-Based Real-Time Fish Counting with YOLOv8 and Image Enhancement for Sustainable Aquaculture .....	316
<i>C Thyagarajan, S Yogadinesh, M Krishnamoorthy, A Ashok Raj, N Yugander, S Gokul Sabari</i>	
Enhancing Brain Tumor Detection Using a 3D Residual Dense Attention Network: A Deep Learning Approach.....	322
<i>Sivakumar Depuru, Seemakurthi Jaswanth, K Amala, S Sivanantham, Kapu Chinthalapalli Ankitha</i>	
AI-Driven Early Warning System for Predicting and Mitigating Urban Flooding: A Comparative Analysis of Real-Time Data and Predictive Algorithms for Enhanced Flood Management .....	327
<i>Sathiyamoorthy M, Subramanian P</i>	
Evaluation of Improved Swin-UNetAlgorithm for Precise Automated Image Segmentation in the Renal Tumour Resection .....	333
<i>Rajagopal K, V Sheeja Kumari, Sivaramakrishnan Rajendar, G. Jenifa, P. Lourdu Mahimai Doss, A. Deepa</i>	
Literature Survey on AI-Based and Traditional Methods for Kidney Tumor Segmentation: A Comparative Performance Evaluation.....	339
<i>N. Muthuvairavan Pillai, Rajagopal K, V Sheeja Kumari, Sivaramakrishnan Rajendar, A. Deepa, Sriram S</i>	
AI-Powered Leaf Disease Detection and Crop Recommendation System .....	345
<i>Pradeep Sudhakaran, V. K. Gnanavel, K. Gunasekaran, Aishwarya S, Preetha M</i>	
Assessing the Impact of Stress on Teenagers Mental Health Using Deep Learning: A Comparative Study.....	350
<i>P. Indumathy, R Praveen Kumar</i>	

Raspberry PI-Based Real-Time Tyre Fault Detection System Using AI .....	356
<i>G. Bathri Prasath, C. Kamalakannan, Sb. Roncarter, J. Kavitha</i>	
Optimized Early Detection of Lung Nodules Using 3D CT Imaging and Deep Learning .....	361
<i>S. Maheswari, Suresh S</i>	
Linux Kernel Module Security Framework for Real-Time Malware Detection and Prevention Compared to Traditional Security Approaches.....	367
<i>B. Shyamala Gowri, V V. Seshadri, D. Sarvesh Aadhithya, J. Sherin Sandra</i>	
Reinforcement Learning-Driven Proximal Policy Optimization on Mental Health Monitoring .....	373
<i>Pavithra. M, Ramya. G</i>	
Enhancing Air Quality Forecasting Using Bi-LSTM: An AI-Driven Approach for Particulate Matter Prediction .....	378
<i>Maheswari. S, D. Roshni, Rithik Narayn S, Samarshedha S</i>	
Data-Driven Analysis of Siddha Naadi Prediction System.....	384
<i>Sree Sharmila T, Vennila M, Surendra Kumar C, Sugunthan S, Shilaja R</i>	
Transfer Learning Enabled Mpox Recognition Using VGG19 for Accurate Medical Image Analysis and Efficient Diagnostic Support in Public Health Emergencies .....	390
<i>Sk Anandha Harini, A. Abirami, J Akshaya Shree, P Harini</i>	
A Neural Network-Based Framework for Robust Detection and Mitigation of Sybil Attacks in Internet of Things Networks.....	396
<i>R Fatima Vincy, J Deepa</i>	
Leveraging AI Driven BERTopic for Accelerated Government Aid Distribution and Comparative Analysis with LDA for Enhancing Policy Decision Making and Resource Allocation.....	401
<i>Anandha Harini Sk, A. Abirami, Akshaya Shree J, Harini P</i>	
Ensemble Learning Technique for Lung Cancer Prediction Using Rotation Forest with PCA .....	407
<i>J S Karthikeyan, A Nithya Sri, B Pavithran, V Kiruthika, B. Rajalakshmi</i>	
Explainable AI-Driven Cyber Threat Detection Using Graph Neural Networks and Large Language Models for Interpretability and Contextual Analysis.....	413
<i>Balaji Vs, Anirudh Ganapathy Ps, Sangeetha K, Raymond Mario Charles, Dannie Jerome E, Velayutham P</i>	
Clinical-Grade Hybrid Machine Learning Framework for Post-Menopausal Sleep Disorder Prediction .....	419
<i>Santhosh Kumar C, Suganthi A, Ganesh Kumar P, Thenmozhi T, Vasudevan I, Sarmiladevi N</i>	
Leveraging Block Chain for Scalable and Transparent Cloud Security .....	425
<i>Golla Bala Renuka, S. Gnanavel</i>	
DiabeDoc: Intelligent Chatbot Prescriptions Based on Medical History and Lifestyle.....	430
<i>C. Arun, Devang Chaudhari, Shaik Abdul Jaleel, S. Rajes Kannan, S. Selvakumarasamy, S. Karthick</i>	
Gesture Control for Enhanced Accessibility.....	435
<i>C. Arun, Nitanshi Bhardwaj, K. Gunasekaran, C. G. Anupama, S. Selvakumarasamy, Krishna Gupta</i>	

EEG-Based Emotion Detection: Exploring Brain Wave Patterns with Transformer Networks.....	442
<i>Sangeetha Sn, Gopalakrishnan B, Boopathirajan P, Yuvaraj D, Sathishkannan R, Karthiga M</i>	
Assessing the Efficacy of LLaMA 3.2 Vision-Language Model in Traffic Surveillance VQA Tasks .....	449
<i>Subashree D, Surendiran B, Mohan S G</i>	
AI-Powered Smart Wildlife Deterrence System.....	455
<i>Akash R., Clement Chriswin V., Balaji Karthick S., Kishore A., Faiza A., Chithra P</i>	
Machine Learning Model to Predict Pre-Term Delivery Using Electronic Health Records.....	460
<i>Ankur Pathak, Rakesh Kumar, Meenu Gupta, Reddy Prasanna Aturu</i>	
Synergizing AI, IoT, and Cyber-Physical Systems: A Cross-Domain Approach for Smart Infrastructure, Secure Networks, and Sustainable Intelligence .....	466
<i>M. Suresh, M Jayaprakash, Saju Raj T, Geetha Ponnaian, Moorthy Agoramoorthy, Saravanan Siddhan</i>	
Evaluating the Impact of Agile Methodologies on Speed and Reliability in DevOps for Large-Scale Systems.....	472
<i>Muthu Selvam., Kanmani. K, J. Vasavi, M Jayaprakash, Dhivakar K, Moorthy Agoramoorthy</i>	
AI-Driven Early Warning System for Predicting and Mitigating Urban Flooding: A Comparative Analysis of Real-Time Data and Predictive Algorithms.....	478
<i>M Sathiyamoorthy, P Subramanian</i>	
Rapid Crime Response System Using AI-Based Surveillance and Dynamic Maps .....	484
<i>Thyagarajan C, Senthilkumar G, Karthikeyan A, Arut Thirumurugan B, Barathvaj N, Hari Varma R</i>	
Virtual Vogue Vision: Revolutionizing Online Shopping with AI-Driven Personalization and Augmented Reality for Enhanced Customer Experience and Operational Efficiency .....	490
<i>Viknesh S. R, Vickna Sai Kumar S. R, Raveen T, Ahsan Shariff M</i>	
Integrating Singularity with Big Data.....	496
<i>Arshad Ali Mohammed</i>	
Indian Currency Detection Using CNN and Transfer Learning .....	501
<i>Naman Kumar Sahu, Atharva Soni, Prabal Pratap Singh Thakur, Sanchita Chourawar, Manish Korde</i>	
Predicting Pancreatic Cancer Using Optimized Predictive Models: A Data-Driven Approach with Enhanced Interpretability .....	506
<i>S. Ponmaniraj, K. Anbazhagan, B. Bharathikannan, A. Divya, T. Sangeetha, R. Sanju Sri</i>	
The Implication of Artificial Intelligence-Powered Chatbots at e-Commerce Platform for Customer Satisfaction .....	512
<i>M. Jayakumar, Leena Jeneffa, G. M Shaju, Sachin Sabharwal, A. Mohamed Ibrahim, Sam D Sathyaseelan</i>	
Detection of Human and Animals for Wildlife Monitoring System Using YOLO.....	518
<i>K. Anand, D. C. Joy Winnie Wise, R. Pugalenti, Alamelu C, Vallikannu M</i>	
Neuromorphic Computing: Mimicking the Human Brain with Machine Learning .....	523
<i>T Haripriya, S Malavika, S. Vinitha, K Loshini, S R Manish Balaji, D. Parameswari</i>	

Empowering Urban Planning Through a Data-Driven Framework for Smart Cities.....	528
<i>Priya Mina, Usha Kumari, Amrita Behera, Megha Dua, Pankaj Gupta</i>	
Preventing SQL Injection Attacks with Machine Learning: A TF-IDF + XGBoost Approach.....	534
<i>Sairabanu S. Pansare, Prerana Sunil Nimbalkar, Prerna Pradeen Mhaske, Samidha Prakash Kadam, Gaurav Pravin Patil, Sanjeevkumar Angadi</i>	
Cloud-Based Network Threat Detection Using Deep Learning Models .....	540
<i>Anish Anand Kurulkar, Abhishek Sitaram Gurjar, Raksha Ravinatha Alva, Tanmay Balasaheb Jamdar</i>	
AI-Powered Deep Learning Model for Driver Behavior Analysis in Intelligent Cyber-Physical Transport Systems .....	546
<i>R. Salini, L. Pavageetha, P. Priyadharshini, D. Sadhana</i>	
High-Resolution Pneumonia Detection and Multi-Class Classification Using VGGNet-19 with Transfer Learning and Explainable AI for Medical Imaging.....	552
<i>A. Manju, J. Jhansi Rani, S. Sri Vyshnavi, A. Kedhar Nadh</i>	
Enhancing Network Security with Deep Learning Based Intrusion Detection Systems .....	558
<i>S. Muruganandam, Linda Joseph, J. Arokia Renjit, Roshan Prakash S, Rohit M, Santhosh Kumar C</i>	
Dynamic Resource Allocation and Optimization in Cloud Computing Using Reinforcement Learning and Federated Learning Techniques.....	564
<i>Thilagavathy Sakthivel, Rajasekar Murugesan, Anitha Gopalan</i>	
Smart Predictive Maintenance System Using Machine Learning for Industrial Automation.....	570
<i>Thilagavathy Sakthivel, Rajasekar Murugesan, Anitha Gopalan</i>	
Enhancing Convergence in Fully Connected Neural Networks Via Optimized Backpropagation .....	575
<i>Rakesh Reddy Thalakanti</i>	
Fake News Detection: A Multi-Model Approach Using Hybrid Machine Learning Techniques .....	581
<i>Vaishnavi Yadav, Shreya Kamble, Prajyot Panmand, Paras Patil, Uma Patil</i>	
An IoT-Integrated Multimodal Deep Learning Framework for Real-Time Early Detection of Neurological and Cardiovascular Disorders.....	586
<i>Antony Pradeesh D, N P Subiramaniam, Y Syamala, Rohith Bala Jaswanth B</i>	
Medico: Transforming Intravenous Therapy with Machine Learning and Internet of Things.....	592
<i>S. Radhika, K. Rajalakshmi, Y. P. Nivedhitha, M. Piramu, G. Valarmathy</i>	
Survey on Morphing Prevention with Morph-Resistant Style Transfer Techniques.....	598
<i>K. Jeeva, G. Niranjana</i>	
Improving System Performance in Cloud Computing Using Machine Learning Algorithms .....	602
<i>Arun Kumar, Rajasekar Murugesan, Anitha Gopalan</i>	
Explainable Fake News Detection with Source Credibility and Decision Transparency .....	606
<i>K. Srinarayani, Kavish Rajpopat, Krishn Patel, Nisarg Chaudhari</i>	
Multi-Modal System for Translating Indian Sign Language and Facial Expressions into Text .....	611
<i>Aman Mehra, Harshit Soni, Jash Bhatt, Poonam Jadhav, Dhavit Gandhi, Arjun K. Jaiswal</i>	
YOLOv11 for Efficient and Accurate Crop Disease Diagnosis .....	617
<i>Nitin Somu, Sivakumar V</i>	

Data-Driven Insights: Enhancing Retail Sales Through Integrating Data Tools for Retail Insights: A Practical Analytics Framework.....	623
<i>Janhavi Joshi, Ayushi Meshram, Dnyaneshwari Anarase, Nupur Dhanorkar, Mayuri Narkhede</i>	
Decentralized DDoS Detection and Blocking System Using ML Models .....	628
<i>Sarika Nyaramneni, K. Sai Madhuri, V. Tarun Balaji, A. Ruthvika, D. Mamatha</i>	
Reinforcement Learning Models for Multi-Agent Environment – an Extensive Study .....	633
<i>Rohini M. S, Anand K</i>	
Unleashing the Power of Brand Awareness in the Fashion Industry Through Artificial Intelligence.....	637
<i>Jagbir Singh Kadyan, S. Siddik, M. Jayakumar, Sathya Aarthi R, R. M. Dilip Charaan, Leena Jeneffa</i>	
Securing IoT Big Data with Byzantine-Resilient and Differential Privacy Ensemble Federated Distillation-BR-DP-FedDF.....	643
<i>Suvathika K, Gomathi N, Shaik Saddam Hussain, K. V. Surya Prakash Reddy</i>	
TEV-STT: Text-Guided Expressive Video Generation from Facial Images Via Spatio-Temporal Transformer .....	648
<i>A Nikhil Prasanna, R Parthiban, S Sunil Kumar, S. Chitrakala</i>	
Advancements in Fish Species Classification: A Comparative Analysis of Modern Architectures.....	654
<i>Aziz Mehevi, Virender Ranga</i>	
IOT Based Smart Syringe Infusion and IV Fluid Monitoring and Alerting System.....	660
<i>Bhaskar Gugulothu, Kristamsetty Nikhil Kumar, Konda Kushal Reddy, Nalamasa Rahul</i>	
Regenerative Braking in Electric Vehicle Using Levenberg - Marquardt Machine Learning Algorithm .....	666
<i>Varsha K, Rohan R, Amutha C, M. G. Umamaheswari, Sivagami V</i>	
3D Reconstruction of Retinal Blood Vessels Using Stacked 2D Segmentation: A Computational Approach for Ophthalmic Imaging.....	672
<i>Sriraman R, Padmasini N, Priya Dharshini P</i>	
An AI-Driven Medicine Information System with Image-Based Identification and Voice-Assisted Access Using Machine Learning Algorithms .....	678
<i>Iyyanar Perumal, Kalaivani. P, Mithun M S, Nagakruthigaa K, Nanthini T, Nishanth R</i>	
Real-Time Scalable and Secure Webhook Notification Handling Using AWS: A Serverless Architecture Approach.....	684
<i>Jagadeesh. P, Sathishkumar M, Deepankumar. E, Prathipa. C</i>	
Survey on Methodologies to Implement Automated Data Entry Using Smart Pen.....	688
<i>M Sivakumar, Soban Shankar, K S Vishal, J Richardson, D. Kavitha</i>	
Design and Development of Privacy Preserving Analytics of Societal Database with Differential Privacy and Deep Learning Mechanism.....	694
<i>N. Gomathi, U. Moses, C. Mahesh, V. Sharmila, Sarath Kumar, Sudish Reddy</i>	
Thozha: A Smart Mobile and IoT-Based Safety Ecosystem for Women .....	698
<i>Rahul Babu M P, Sivadharshini S, Vardhini V</i>	
A Self-Attention Framework for Abstractive Summarization of Meeting Conversations .....	704
<i>K S Vishal, D. Kavitha, Sivakumar M, Ramsundar M, C Renil Immanuel</i>	

AI-Driven Prognostic Monitoring and Personalized Intervention Platform for Alzheimer's.....	709
<i>Madhumitha Chandrasekaran, Jessica Pragalathan, N. Kalaichelvi, M. Mohammed Iqbal</i>	
Plagiarism Detection and Scientific Article Classification Using Winnowing-Based Fingerprinting and Graph Neural Networks .....	715
<i>D. Kavitha, Tharun Kumar P, K S Vishal, Siva Surya V S, Surya S</i>	
Real-Time Threat Detection and Response in Cloud-Based Telemedicine Using Deep Reinforcement Learning.....	721
<i>Bhuvaneswari. M, Karthikeyan M. V</i>	
Proactive URL-Based Threat Detection for Data Breach Prevention in XDR-Driven Cybersecurity Systems.....	727
<i>Angeline Gnana Prakasi. Y, Karthikeyan M. V</i>	
A Study on Various Approaches Used in Medical Image Security Using Visual Cryptography .....	733
<i>Krishna Cj, N. Kumar</i>	
Emotion Detection Using Face Expression and Heart Rate to Alert Gamers .....	739
<i>T Nithya, S Mahendrakumar, A Priya Keerthana, M Sakthi, S Monish, S Nandini</i>	
IoT Established Ecoplastirid Rover Integrated with Machine Learning.....	745
<i>A. Sangeerani Devi, Lithika Sri G, Asmitha S J, Dharshini D</i>	
A Hybrid Convolutional Neural Network Approach to Detect Neurodegenerative Disorder: Parkinson's Disease .....	750
<i>Nithya T, Chandrasekaran V, Keerthana D G, Divya S S, Dharanikumar K, Hanis Hubert P C</i>	
An Optimizing Technique for Automatic Plant Smart Irrigation Management System Using IoT Sensor Networks.....	756
<i>R. Elavarasi, Senthil G. A, S. Geerthik, Dharshan. K, Saran S. K.</i>	
Detecting Shilling Attacks Using Hybrid CNN+Bi-LSTM Model of Social Networks.....	762
<i>M. Sunitha, N. Venkatesh</i>	
Automated Attendance Tracker with Face Recognition .....	768
<i>Gopala Krishnan E, Arunkumar R, Vimal L, Shali A</i>	
Web-Based Multimodal Carbon Emission Calculator for Indian Coal Mines.....	773
<i>Pandithurai O, Abisheak J, Lokesh G, Abhishai Anandarai, Praveenkumar J, Kanishga S</i>	
Enhancing Cancer Prediction Accuracy: Investigating Novel Machine Learning Approaches for Early Detection.....	779
<i>R Delshi Howsalya Devi, S. N Manoharan, M. S. Vinmathi, Kumutha Duraisamy, R Surendran</i>	
Enhanced Cryptography for Secure Data Sharing in Cloud Computing Using Optimal Key Selection .....	785
<i>Vadla Navakishor, Richa Tiwari, Manoharan S. N, Surendran R</i>	
Coordinating Incident Response and Risk Management for Enhanced Cybersecurity: A Comprehensive Analysis .....	791
<i>Loganathan S, M Jayaprakash, K. Gunasekaran, Raju Shanmugam, D. Vinoth, Moorthy Agoramoorthy</i>	
Transforming Workforce Efficiency with Machine Learning: A Next-Gen Approach.....	797
<i>Kumutha Duraisamy, Sundresan Perumal, Ramkumar Valluru, Manoharan S. N, Surendran R</i>	

Financial Stability Classification with Personalized Recommendations and Transparent Clustering .....	803
<i>Srinarayani. K, S Kishan, D Harshika, T Swetha</i>	
Smart Pen with Contextual Intelligence: Revolutionizing Handwriting Recognition and Form Automation.....	809
<i>C Renil Immanuel, K S Vishal, Sivakumar M, Swaminathan V M, D. Kavitha</i>	
Precision Parameter Control in Hydroponics Farming Using Cloud-Connected IoT Framework .....	815
<i>Aravindhyan V, Vibhuti Joshi, Maanas Varma Sh, Deena Athithyana D, Ramanaa Vijayakumar, Sangeetha N</i>	
Smart IoT Solutions for Over Current Protection.....	821
<i>Anitha S, S. Sreedevi, Swapna S</i>	
Comparing Auto Scaling Efficiency of Serverless Applications Using AWS Lambda and Azure Functions in E-Commerce Platforms.....	827
<i>S. Alagu Thangam, T Saju Raj, T. Suresh Balakrishnan, V. R. Vimal, Geetha Ponnaian</i>	
Improving Object Detection in Low Light Surveillance Using Hybrid Image Fusion Techniques Over Traditional Filtering Methods.....	833
<i>T Saju Raj, S. Alagu Thangam, T. Suresh Balakrishnan, Geetha Ponnaian, V. R. Vimal</i>	
AI-Automated Ungual Pathological Classification Leveraging AI-Enhanced Image Processing Techniques for the Early Detection of Onychopathies .....	839
<i>K Ramya, Varshitha Priya Kasa, Garimella Lakshmi Gayathri, Poojitha Nuthalapati, A Senthilselvi, P. Meenalohchini</i>	
ALDNET - Apple Leaf Disease Detection Net Using Deep Learning .....	845
<i>Muthaiah U, Mouluka Sai Lakme C. S, Pradeep Kumar L</i>	
GeneCare: An AI-Powered System for Disease Prediction, Personalized Treatment, and Risk Monitoring.....	851
<i>N Trishala, Bharath Balasubramanian, S Raghavan, G Priyaasri, A Jeyanthi</i>	
Deep Learning-Based User Behavior Prediction for it Security and Fraud Detection .....	857
<i>Sangeethaa Sn, Balamurugan M, Boopathi Rajan P, Shobana G, Biju J, Nivedha S</i>	
BEAM: An AI-Powered Cybersecurity Assistant for Proactive Threat Detection and Mitigation .....	863
<i>Trishala N, Bharath Balasubramanian, Raghavan S, G Priyaasri, A Jeyanthi</i>	
An AI-Powered Autonomous Cybersecurity System for Real-Time Threat Detection and Adaptive Countermeasures on IoT Edge Devices.....	869
<i>S. Ananth, T. Nithishwar, A. Senthamilselvan, S. Harish, M. Sanjai, P. Vimal Raj</i>	
AI-Powered Child Protection with Instant Content Redirection .....	873
<i>S. Ananth, P. Jayapriya, S. Kishore, B. Pravin, R. Sathish Kumar, V Thamizhmani</i>	
Real-Time Smart Meeting Assistant Using Edge AI for Audio Capture, Speech-to-Text Conversion, and Meeting Scheduling.....	877
<i>A Senthilselvi, Mohammad Saquib Daiyan, Mosaab Ahmad, Rajul Mishra, Pakshal Tata, Balika J Chelliah</i>	
Incentive-Aware Blockchain-Based Real-Time Energy Settlement Framework for Efficient Peer-to-Peer Microgrid Trading .....	883
<i>Aiswarya S, J. Vasavi, S. Parthiban, K. Gunasekaran, V. K. Gnanavel</i>	

RESALDNET – Apple Leaf Disease Detection Using Resnet 50 .....	889
<i>U. Muthaiah, Moulika Sai Lakme, Pradeep Kumar</i>	
Self-Supervised Learning for Rare Disease Diagnosis Using Limited and Imbalanced Medical Imaging Data .....	895
<i>S. Saranya, S. Christy, V. Sheeja Kumari, S. Brintha Rajakumari, S. Sharon Priya</i>	
Real Time Stock Data Extraction, Sentiment Analysis, Summarization and Prediction .....	901
<i>Anushka Doiphode, Karan Bora, Sarthak Gojorekar, S. Shah</i>	
Real-Time Financial Fraud Prevention with Ensemble Models and Streamlit Integration.....	907
<i>R. Anushiadevi, Rameshkar B, Harish Narasimhan K, Chetan K S, Selvakumaran B, Veeramuthu Venkatesh</i>	
Papvision: Nextgen Deep Learning Diagnosis of Cervical Cancer from Papanicolaou Smear Test .....	912
<i>Deepika K R, Vijayarani N, Rushi Raval, Swarna Surekha, Karthigai Priya G, Keerthana N V</i>	
A Hybrid SVR-RNN Approach for Predicting Water Potability in Chemically Contaminated Regions.....	918
<i>Jahnvi Neelam, Suthir S, Nivethitha V</i>	
Enhanced Sales Forecasting and Customer Satisfaction Using a Machine-Learning Model .....	924
<i>N. Sinouvassane, G. Amirthayogam</i>	
Leveraging IoT in Digital Marketing Campaigns for Enhanced Customer Engagement and ROI.....	930
<i>Jagbir Singh Kadyan, Catherine. S, E. Rushit Gnanaroy, M. Jayakumar, Leena Jenefa, Ambika Bhuvaneshwari</i>	
Power Efficient Systolic Array Design for Machine Learning Acceleration .....	936
<i>Komathy Vanitha Krishnan, Prediksha. D, Sowmya P. K, Sivalingan. K</i>	
Data-Driven Cervical Cancer Diagnosis: Leveraging the VIA Dataset with Deep Learning Architectures .....	940
<i>A. R. Jariya Begum, S. Rajeshkannan</i>	
Enhancements in Brain Tumor Detection and Classification Using Deep Learning on MRI Data .....	946
<i>Sivakumar Depuru, M. Sunil Kumar</i>	
Strategic Leadership in Autonomous Vehicle Integration for Enhanced Urban Mobility .....	952
<i>K. Sudharson, K. Selvi, Catherine T. C, L. Anitha, A. Sureshkumar, V. Subhashini</i>	
Innovative Management Approaches to IoT Networks for Sustainable Smart Homes.....	957
<i>K. Sudharson, K. Selvi, M Ganesan Kanagaraj, V. Udhayarani, K. K. Devi, L. Anitha</i>	
Assessing Employee Engagement's Impact on Performance and Enhancing Sustainable Economic Growth.....	962
<i>K. Selvi, L. Anitha, P. Akilandeswari, A. Sureshkumar, Parveen Banu. S, C. Sathiyamoorthy</i>	
Empowering Gamers: Building Customized Game Tools Through API Integration – a Case Study with Clash of Clans .....	968
<i>C. Swedheetha, P. Manikandan, Naganimesh S, Mohammed Shihab S, Santhosh Kumar Ksd, Kabhi Shalan M</i>	
Strategic Leadership in Educational Technology for Enhanced Learning Outcomes and Market Growth.....	973
<i>K. Selvi, K. Sudharson, A. Suresh Kumar, L. Anitha, R. Saranyadevi, A. Rahamath Nisha</i>	

The Role of Government Policies in Promoting Sustainable Entrepreneurship Development.....	978
<i>C. K. Reji, V. Chitra</i>	
DeepRoadGuard:Enhanced Pothole Detection Using Bayesian Fusion and Night-Vision Data .....	983
<i>G N Akshay, B Jaisachin, N Vasanthakumar, K Anand</i>	
Multi-Class Image Classification of Food Recognition and Nutritional Analysis Using DNN.....	989
<i>Vishal Yadav, Atishay Jain, Sanatan Ratna</i>	
IoT Assisted Anomaly Detection System for Rehabilitation and Care Centers.....	994
<i>A. K. Shukla, A. Sharma, H. Saini, R. K. Ratnesh</i>	
Enhanced Intelligent Attendance Management System for Smart Campus Using Computer Vision.....	1000
<i>A. Vijayaraj, V. Sabapathi, Shai Kumar R, Karthiga. R, R. Megavannan, N. Mageshkumar</i>	
Pyrolysis Based Fuel Production: A Green Alternative to Conventional Energy .....	1006
<i>A. Vijayaraj, Gayathri. R, Tharun Kumar. S, V. Sabapathi, M. Srinivasan, Karthiga</i>	
Edge-AI Enabled IoT Framework for Nutrient-Rich Microgreens Production Under Indoor Conditions .....	1011
<i>Piyush More, Varad Mane, Manas Doshi, Mahesh Miriyala</i>	
Ward Voice: A Mobile Governance Platform for Transparent and Interactive Civic Engagement.....	1017
<i>A. Vijayaraj, Jayaseelan. U, Dinesh. S, Aravindhana. V, Balaji Ganesh. K, T. Mahalingan</i>	
Federated Hybrid AI-Powered Cybersecurity Framework for Adaptive Threat Detection.....	1024
<i>A. Vijayaraj, T. Mahalingam, C. Teja Krishna, M. S. Sugumar, N. Vigneshkumar, V. K. Yeshwanth</i>	
Enhancing Social Media Trust: Identifying Fake News with Domain Reputation and Content Insights .....	1031
<i>Thejeshwar V R, A. Vijayaraj, V. P. Murugan, R. Megavannan, Mageshkumar. N, Sarvesh Padmakumar</i>	
Hybrid Machine Learning Approach for Fake Job Detection Management System .....	1036
<i>Thejeshwar V R, R. Megavannan, V. P. Murugan, A. Vijayaraj, Mageshkumar. N, Padmalosani Dayalan</i>	
Cloud Computing for Internet of Things (IoT): Opportunities and Challenges .....	1043
<i>Elavarasi Kesavan, Senduru Srinivasulu, Noel Maria Deepak</i>	
AI-Driven Traffic Signal Optimization for Better Congestion Control.....	1049
<i>Lakshay, Kriti Gupta, Anupam Mittal, Sushmithareddy Bethi</i>	
Software Composition Analysis for Proactive Threat Detection in Software Dependencies with Real-Time Security Monitoring.....	1055
<i>Chinni Krishna Kowsik P, Uday Reddy H, Udhayakumar S, Saranya G</i>	
Construction Cost Estimation Using Hybrid Stacking of Random Forest and XGBoost.....	1061
<i>Charanjit Singh, Rohit Shinde, Palvi Sharma, Bhim Sain Singla</i>	
A Game Theory-Based Design Optimization Platform for Click Through Rates with Blockchain.....	1065
<i>Saumya Gaur, Udhaya Kumar S</i>	
AI-Powered Real-Time Speech-to-Sign Language Conversion for Versatile Communication .....	1071
<i>G. B. Santhi, S. Priyadarsini, W. Lydia Shammi, M. Lavanya, S. Madhu, R. Karthikeyan</i>	

Intelligent Parking Management System with Integrated EV Charging Station Locator .....	1077
<i>G. B. Santhi, S. Priyadarsini, W. Lydia Shammi, M. Lavanya, S. Madhu, R. Karthikeyan</i>	
HRL-GT: A Hybrid Reinforcement Learning and Game Theory Framework for Energy-Efficient Cluster Head Election and Routing in Underwater Sensor Networks .....	1083
<i>Sivsakhiselvan S, Palanivelan M, Sridevi N, Purushothaman K E</i>	
Advanced Privilege Escalation Prevention System for Windows .....	1089
<i>Sakthimurugan S, Sabarishwaran S, Geetha K</i>	
Advanced Machine Learning Techniques for Early Heart Disease Detection.....	1094
<i>R. Kokila, Pedduri Vamshi Krishna, Ch. Indira Priyadarsini, Prathiba M K, S Nagakishore Bhavanam, M. Arul Selvan</i>	
A Deep Learning Model Using VGG19 and Random Forest for AMD Stage Classification on Retinal OCT Images .....	1100
<i>D. Mahalakshmi, S. John Justin Thangaraj</i>	
Longevity of Power Transformers Developing ML a for Accurate Lifetime Estimation .....	1106
<i>Tamilvizhi T, Shivani S, Thabiba B, Vatturi Harshitha</i>	
An AI-Based Framework for Real-Time Patient Monitoring and Intelligent Treatment Recommendation in Critical Care Units.....	1111
<i>Tamilvizhi T, Thirumalini R, Takshinyaa M, Orugunda Dedeepya</i>	
Enhancing Smart Contract Security: A Comprehensive Vulnerability Assessment Framework .....	1116
<i>Aditya Shewale, Dhanyasree Thallapalli, S. Udayakumar</i>	
Automated Root Cause Analysis in Large-Scale IT Infrastructure Using Big Data Analytics .....	1122
<i>Venkatesh Kodela, Gangadhararamachary Ramadugu, Vivek Bairy, Gaurav Rathor, Meemu Gupta</i>	
Automated Image Classification for Leaf Disease Detection Using Deep Learning Techniques.....	1127
<i>Dhakshunhaamoorthy, K. Sudharson, P. Girija</i>	
Heart Health Revolution: An Ensemble Approach to Predicting Cardiovascular Disease .....	1133
<i>Dhakshunhaamoorthiy, P. Girija, R Sandhiya, K. Sudharson</i>	
AI-Driven Health Portal: Machine Learning for Chronic Disease Prediction and Personalized Care .....	1138
<i>Dhakshunhaamoorthiy, Sriram Avinash Gupta, Nettem Chiranjeevi Sai Rithvik, Naga Poola Likhith Kumar</i>	
Explainable Vision Transformer Framework for Early Detection of Age-Related Macular Degeneration .....	1144
<i>D. Mahalakshmi, S. John Justin Thangaraj, C. Alamelu, M. Vallikkannu</i>	
A Robust Protection System for Women: Smart Device Using Sensors.....	1150
<i>J. Rajeswari, S. Ohm Shankar, S. Piriyaadharshini, S. Gangalakshmi, S G. Kalpanadevi, S. Sushmitha</i>	
LS-HRF-X: An Explainable Random Forest Framework for Landslide Risk Assessment Using Hybrid Sampling Technique .....	1154
<i>G Loganathan, N Kumaran, M Palanivelan, K Dhanalakshmi, V Asokan, N Sathish</i>	
XBFS-CB: An Explainable Categorical Boosting Framework for Lithium-ion Battery Fault Detection Using a Sampling Techniques .....	1160
<i>G Loganathan, N Kumaran, M Palanivelan, K Dhanalakshmi, V Asokan, N Sathish</i>	

Artificial Intelligence-Based Deep Learning Methods for Lung Cancer Identification .....	1166
<i>Sethupathi Venugopal, D. Prabhu, Md Javeed Ahammed, R. Narmtha Banu, P. Meenalohchini, Vasujadevi Midasala</i>	
Artificial Intelligence-Based Diabetes Risk Prediction Using ML Algorithms .....	1172
<i>D. Prabhu, Amol Phatak, Madhavi Ranjeet Patil, Choudhary Ravi Singh, Nagakishore Bhavanam, S. Kaliappan</i>	
Robotic Melanoma Skin Cancer Identification Using Artificial Intelligence and Convolutional Neural Networks.....	1178
<i>M. Princy Usha, Prabakaran P, Prabhjot Kaur, Dhiraj Kapila, M. Arul Selvan, Nagakishore Bhavanam</i>	
Deep Learning-Based Plant Leaf Disease Identification Using Cutting-Edge CNN and Transfer Learning .....	1184
<i>A. Anorelin, Ananda Sabari Rajan B, Choudhary Ravi Singh, P. Suresh, A. Lakshmi, S. Kaliappan</i>	
AI-Driven Transparent Employee Performance Appraisal and Development Systems.....	1190
<i>Jeyaprabha B, Ravindra Asharam Kayande, P. Suresh, R. Karthick, S. Kaliappan, D. Prabakar</i>	
Interpretable Machine Learning for Breast Cancer Biomarker Discovery: SHAP-Enhanced Analysis of Gene Expression and Sequence Patterns.....	1196
<i>A. Sathya, Aadithya Prabha R, J. Jino Blessy</i>	
Genomic and Imaging Biomarker Analysis in Lung Cancer: A SHAP-Guided Approach .....	1204
<i>A. Sathya, Deevna Reddy R, J. Jino Blessy</i>	
Dual Time-Step Hybrid LSTM-GRU Networks for Stock Price Forecasting: A Case Study on NIFTY 50 .....	1211
<i>Sai Rakshaan P, Jeevika Tharini V</i>	
Secure Health Information Exchange (HIE) System Using Symmetric Key Encryption and Decentralized Key Management .....	1217
<i>Aruna A, S. Yuvan Nanish, Hemanth P.</i>	
Artificial Intelligence Based Glaucoma Detection Using Improved Convolution Neural Network Algorithm .....	1223
<i>M. Princy Usha, Prabakaran P, Prabhjot Kaur, Dhiraj Kapila, M. Arul Selvan, Nagakishore Bhavanam</i>	
Predictive Modeling for Earthquake-Resilient Structures Using AI: Structural Neural Adaptive Architecture .....	1229
<i>Priyanka Rajesh Patil, Sumit Dilip Ingle</i>	
AI-Driven Water Resource Management Systems .....	1234
<i>J. Uthayakumar, Swapna, A. Ravikumar, S. Sreeraj, R. Senthilkumar, Babu Pandipati</i>	
AI-Infused BIM Systems for Generative Design and Life Cycle Optimization in Modular Construction .....	1239
<i>Sayantana Dutta, Anupam Kumar Biswas, Chanchal Das, Satabdi Saha, Md. Hamjala Alam, Koynndrik Bhattacharjee</i>	
Identifying Epilepsy and Epileptogenic Zone Using Deep Learning Techniques .....	1245
<i>A. Shahina, Nabeel Hussain M N, Shreya P S, Shravanti Murugesan, Preethi Bijoy, A. Nayeemulla Khan</i>	

EEG-Based Brain-Computer Interface for Recognizing Digits Using Deep Learning Models.....	1251
<i>Renuka Botwe, A. Shahina, Saravanan Alagarsamy, Kharihara Sudhan K, Durgadevi Velusamy, Nayeemulla Khan</i>	
YOLO Based Object Detection in Advanced Driver Assistance Systems -ADAS.....	1257
<i>M. Ayyadurai, D. Anu, Abdelhalim Mohammad Jubran, Ankur Bahl, M Dinesh</i>	
Deep Learning Framework with Feature Fusion for Enhanced Detection of Diabetic Retinopathy in Retinal Fundus Images .....	1262
<i>M Praveen Kumar, V Khanaa</i>	
Comprehensive Evaluation and Improvement Strategy of College English Oral Fluency and Pronunciation Accuracy Driven by Artificial Intelligence.....	1268
<i>Mi Zhao</i>	
Intelligent Prediction of Employment Trends and Precise Ideological and Political Education Policies for College Students Majoring in Tourism Management Based on Big Data and Machine Learning Algorithms.....	1274
<i>Cong Huang, Zimo Li</i>	
Analysis of Personalized English Teaching Path Planning and Strategies Under the Integration of Big Data and Artificial Intelligence.....	1282
<i>Di Pan</i>	
Adaptive Clutter Suppression Technology for Radar Signal Processing Based on Autoencoder and Residual Network.....	1290
<i>Jie Wu</i>	
Research on Enterprise Financial Risk Early Warning Models Based on Machine Learning .....	1295
<i>Aijia Guo</i>	
AI-Driven Automated Generation and Innovative Design System for Traditional Intangible Cultural Heritage Patterns .....	1300
<i>Feng Wang</i>	
Automated Classification of Beehive Health Conditions Using MobileNet Deep Learning Model .....	1304
<i>Bhavana D E, Sinchana B L, Sonu B R, Siri Shetty K, Siri K P, Arpitha C N</i>	
Transforming Underground Electric Cable Management with AI in Smart Cities .....	1310
<i>Majjari Venkata Kesava Kumar, Sathya Kannan, Venkata Narasareddy Annapareddy, Balaji Adusupalli, Srinivasarao Paleti, Srinivasa Rao Challa</i>	
Blockchain and AI for Securing Electrical Infrastructure.....	1316
<i>P. R. Sudha Rani, Dwaraka Nath Kummari, Srinivas Kalyan Yellanki, Raviteja Meda, Hara Krishna Reddy Koppolu, Ramesh Inala</i>	
Addressing Ethical Challenges in AI-Driven Health Predictions .....	1322
<i>Busireddy Hemanth Kumar, Sai Teja Nuka, Mahesh Recharla, Chaitran Chakilam, Sambasiva Rao Suura, Chandrashekar Pandugula</i>	
AI-Driven Innovations in Infrastructure Management with 6G Technology.....	1328
<i>Aaluri Seenu, Goutham Kumar Sheelam, Shabrinath Motamary, Raviteja Meda, Hara Krishna Reddy Koppolu, Ramesh Inala</i>	
Vehicle-To-Grid (V2G) Technology for Hybrid Vehicles.....	1334
<i>Anand Bhat B, B. Preethi, Sanjay Kumar S M, Vedha Vinodha. D, M. Pushpavalli, S Ravikumar</i>	

Hybrid Vehicle Integration for Smart and Sustainable Urban Mobility .....	1340
<i>Vishwanadham Mandala, Aaluri Seenu</i>	
HR Challenges in Managing Hybrid and Remote Work Forces Using Deep Learning: An Implementation Framework .....	1346
<i>Ramchandra D. Patil, Sofia Khan, G S Nagalakshmi, R Karthick, A Pushpalatha, Archana M Kinagi</i>	
Emotchy Glass.....	1352
<i>S. Devipriya, H. Mercy, M. Vanitha Sheba, P. Mahalakshmi, Maria Jeraldin Sindhia, A. Santhya</i>	
Smart Prediction of Cardiac Conditions by Integrating Binary Classification and Data Privacy in Healthcare Analytics.....	1357
<i>D. Divya, R. Manivannan, S. Bangaru Kamatchi, M. P. Vaishnnave</i>	
Enhancing Neural Style Transfer: A Deep Dive into VGG19 Network.....	1363
<i>Senthilnayaki Balakrishnan, Dharanyadevi P</i>	
African Birds Identification Using Swing Transformer .....	1369
<i>B. Senthilnayaki, Maram Y. Al-Safarini, Shanthi Thangam Manukumar, T Aswani</i>	
No-Fire and Fire Detection in UAV Collected Images with Lightweight Deep-Learning.....	1375
<i>D. Logeshwari, Mohammad Kanan, Siva Sunasundram, K Swetha, J. Gopika, M. Monika</i>	
Detection of Covid19 in Chest X-Ray with EfficientNetV2 Models-A Study .....	1380
<i>Abijith G R, Ali Elrashidi, P. Illavarason, G. John Samuel Babu, Madhumitha Sathish, E. Roshini</i>	
ConvNeXt Model Based Classification of Fundus Retinal Images into Healthy/Cataract.....	1385
<i>K. Vijayakumar, Mohammad Kanan, Siva Sunasundram, A. Saikumar, V. Kaushik Narayanan, R. Srirakesh</i>	
Detecting Suicide Ideation Through Multimodal Analysis on Social Media Using an Adaptive Fusion Transformer Model (AFTM) .....	1390
<i>P. Jeyakani, B Muthusenthil</i>	
Detection of Benign/Malignant Skin Cancer with Deep Transfer Learning Using Fused Features .....	1395
<i>K. Vijayakumar, Mohammad Kanan, R. Infant Raj, Bhukya Balakrishna, S. Prabha, N. Surya</i>	
Automatic Detection of TB in X-Ray with Deep Learning Model.....	1400
<i>K. Vijayakumar, Ali Elrashidi, Syed Mohammad Nihal Bin Syed Waseem Zaidi, K. Srinija, G. Janani Priya, G. Varun</i>	
Automatic Analysis of Blood Cell Images for Malaria Detection with Fused Deep Features.....	1405
<i>P. Jeyakani, Ghassan Samara, P. Illavarason, Ravi Gangadharolla, M Sai Teja Sree, Timmapuram Vyshnavi Reddy</i>	
Detection of Brain Tumor Class in MRI Slices with ResNet Models: A Study.....	1410
<i>K. Vijayakumar, Ali Elrashidi, Danieal A, Navyatha Ravi, B. Janani, S. Keerthiga Veni</i>	
Integrating Intelligent Agents in Smart Irrigation Systems for Sustainable Paddy Cultivation.....	1415
<i>D. Lekha, P. Valarmathie</i>	
Agentic AI: An Inclusive Investigation of Current Initiatives and a Roadmap for a Sustainable Future Expansion.....	1422
<i>P. M. Joe Prathap, W Vinil Dani, L Sherin Beevi, Mandyam Jyothis Kiran</i>	

Enforcing Fine-Grained Access Control in Smart Homes Via Blockchain and Biometric-Based  
Smart Contracts ..... 1428  
*Chinnaraj Govindasamy*

**Author Index**