

2026 6th International Conference on Pervasive Computing and Social Networking (ICPCSN 2026)

**Salem, India
6-8 May 2026**

Pages 1–630

IEEE Catalog Number: CFP26EZ5-POD
ISBN: 979-8-3315-7237-2



Copyright © 2026, IEEE

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:	CFP26EZ5-POD
ISBN (Print-On-Demand):	979-8-3315-7237-2
ISBN (Online):	979-8-3315-7236-5

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

TABLE OF CONTENTS

Autonomous Multi-Agent Cyber Defense for Mitigating AI-Generated Threats	1
<i>Prajwalasimha S N, Dilip Kumar Jang Bahadur Saini, Ananya S, Abhiram B</i>	
Graph Learning-Enhanced U-Net for Early Gastric Cancer Detection and Segmentation	9
<i>K.Menaga, Chamundeeswari R M, P. Pandiyarajan, C. Preethibha, Machiraju Sivakumarraju B.Beaula Pinky</i>	
Real-Time MPPT Optimization for PV-Battery Hybrid Systems in EV Fast Charging Infrastructure	14
<i>Madhumathi R M, Bharath M, Mahadevan V, Thanagan K, Udayan K</i>	
Personalized MOOC Course Recommendation using Skill-Aware Hierarchical Learning Paths	22
<i>T. Padma, N. Vijay, S. Praveen</i>	
An EfficientNetB3 based Deep Learning Framework for Automated Mouth Cancer Detection using Histopathological Images	28
<i>T.Baba, K. Kavitha</i>	
Quanta-Health: A Smart Real-Time Monitoring and Alert System with Health Status Prediction for Bedridden Patients	34
<i>Helan Vidhya T, Nivedha J, Nikilesh S, Preneshiya V</i>	
A Fairness-Aware and Explainable Dynamic Feature Random Forest Framework for Intelligent Loan Eligibility Assessment	42
<i>Kannan R, Naresh K, Sarveshwaran S, Surya C, Vaishnavi J</i>	
Hybrid Two-Stream Deep Learning for Human Activity Recognition using Convnext and Temporal Convolutions	48
<i>Kalaivaani PCD, Haresh L S, Janarthikan V, Jayaanth S R</i>	
AI-Driven Blue-Collar Workforce Training & Skill Enhancement Hub: Revolutionizing Vocational Training through Intelligent Automation	54
<i>Abhishek Jaden Vethanayagam</i>	
An Explainable Deep Learning Framework for Automated Polycystic Ovary Syndrome Detection using Ultrasound Imaging	63
<i>J.Prathibanandhi, G.S.Annie Grace Vimala, S. Alfiya, Shyni M, Helen Sathiya V, T. Dinesh Kumar</i>	
Optimized ConvNeXt-Tiny Architecture for Clinical Prediction of Hypothyroidism using Enhanced Deep Learning Analytics to Strengthen Early Diagnosis and Sustainable Healthcare Innovation	69
<i>Anbalagan S</i>	
Seva TeleHealth: An AI-based Multilingual Telemedicine Framework for Rural Healthcare Delivery	75
<i>Manmith Gopari, Mothe Rahul, Sakshi Takkar, Mahesh Ponna, Rishindra Karrolla, Kamalakar Reddy</i>	
A Comprehensive Study of Deep Learning Techniques for Early Detection of Frontotemporal Dementia	83
<i>Anila M, Rajitha S, G Kiran Kumar</i>	
Deep Learning-based Detection of Mango Leaf Diseases and Nutrient Deficiencies using DenseNet-121	91
<i>Kiran Kumar Jajala, Suresh Babu Jugunta, S Girinath, Gurajala Laasyapriya, Katta Teena Reddy Kovuru Srivalli</i>	

SA-GACRP: Spectral Attention-Enabled Generative Adversarial Network-based Cloud Removal Preprocessing Model	98
<i>Pawan Kumar C Patil, Shashidhar Sonnad</i>	
Enhancing Groundwater Level Forecasting using Hybrid Machine Learning Techniques	106
<i>Sai Vijaya Ch., Srikanth J., Khyathi Pradha Rayavarapu, Keerthana Komirishetty, Rohith Reddy Bobbala Sanath Bharadwaj Pendam</i>	
Decoy-Enhanced Framework for Threat Protection in Intellectual Property	112
<i>B. M Brinda, Hemashree D, Kavipriya V, Kiruthiga D, Roshini R</i>	
Artificial Intelligence for Natural Voice Synthesis: Bridging the Gap Between TTS and Human Speech	119
<i>Harikrishnan J, Irfan Ifthikarur Rasool, S. Mangairkarasi</i>	
Cloud-Enabled Backup and Recovery Architecture for High-Availability Data Management	126
<i>Yash Narayan, Kashish Gupta, Yogesh Rajput, Swastik, Simran</i>	
Integration of Quantum Data Mining Algorithms into a Hybrid Benchmarking Framework for Big Data Analytics	132
<i>Akhil Chowdary Chalasani, Mohanraju Muppala, Shashi Purna Kurapathi</i>	
A Survey on Quantum Reinforcement Learning for Cloud Task Scheduling	139
<i>Khusbu Pradhan, Santanu Kumar Mishra</i>	
Machine Learning based Forecasting of Migration Pressure and Housing Stress using Open Data	147
<i>C.Maddilety, B.Chandrakala, Kuruva Harika, Akkem Gayathri, Basapuram Thanuja, Golla Mounika</i>	
A Hybrid Co-Learning Framework for Explainable Multimodal Sentiment Mining from Online Reviews	155
<i>Vigneshwaran Y, Sibiraj T, Dharsana Dharani VG</i>	
Cognitive Networking using Deep Reinforcement Learning for Real-Time Optimization	163
<i>Jobin Thomas, Riya Sanjesh, Devi Priya V.S., Galiveeti Poornima</i>	
Deep Learning for Medical Image Analysis: CNN-based Pneumonia Detection on Chest X-Rays	169
<i>Katia Haveri, Narasimha Rao Vajjhala</i>	
An Emotion-Aware Neural Framework for Personalized Video Recommendation	175
<i>K.Pradeep, M.Sai, Ch.Satya Katyayini, D.Kamal Kumar Naik, K.Jayendra Prasad Naik</i>	
Hybrid Ensemble-based AI Intrusion Detection Framework Leveraging Sequential Deep Learning and Feature-Optimized Machine Learning for Real-Time Multi-Tier Network Threat Classification	182
<i>A Ajeeth, A Sivanesan, Boddu Prabhas, N V Sagar Varaprasad, Avaneesh R, R Sri Sabarish</i>	
Smart Emergency Response Systems using IoT and Edge Computing in Health Care	189
<i>Daniella Esther, Godswill Nkenganyi Fonge, Chiedza Mutinha, Pardeep Kumar</i>	
A Dual-Stream Feature Fusion Framework with PCA-based Dimensionality Reduction for Remote Sensing Image Retrieval	195
<i>Monica Palla, Renu Karra</i>	
Vision-Driven Architecture for Translating, Segmenting and Interpreting Radar-based Satellite Imagery	201
<i>Naveen Karthik R, Varun Kumar G S, Ilamurgan G</i>	

A Deep Learning Approach for Metal and Plastic Waste Segregation	208
<i>Roopashree V, Seejal Sivakumar, Vedhavarshini J, Balaji M</i>	
LLM – based Conversational Agent for Online Food Ordering Platform	214
<i>Sadish Sendil Murugaraj, Umanandhini D, Vidushini Maria Gnanapragasam, Shahirun</i>	
Approximate Computing based Low Latency VLSI Architecture for Real Time Signal Processing	220
<i>E.Adline Kerana, Ahmad Al-Qerem, M. Tamilselvi, Anusha B, Bh.Prashanthi, Amit Dutt</i>	
Gradient Adaptive Convolution Framework for Enhanced Visibility in Low-Light Crime Scene Face Detection	226
<i>Harsha Varthanan S, Madhava K, Harish B, Balamuralikrishnan G</i>	
Deep Reinforcement Learning–based Robot Path Planning using PPO in 2D Dynamic Environments	233
<i>Bharani Sethupandian S, Gottipati Ashokarao, Gangireddy Prabhakar Reddy, Md Keramot Hossain Mondal P Sudheer, S. Kaliappan</i>	
Real-Time Arrhythmia Detection using Explainable CNN-LSTM with Grad-CAM and SHAP Interpretation	240
<i>Syed Fiaz A S, Aditya R, Anukruthika G, Jaishree S S, Saran Raj Sowrirajan, R. Rajmohan</i>	
Oral-Mamba vs. Swin-UNet: A Comparative Deep Learning Analysis for Gingivitis, Dental Caries, and Dental Calculus Segmentation	246
<i>Remya R Prabhu, Neeraja K, Vimina E R</i>	
Event-Trace Cohesion Metrics for Live Co-Authoring Streams	252
<i>Pratik Dhameliya</i>	
A Machine Learning–Driven Framework for Workforce Skill Gap Analysis and Predictive Talent Development	261
<i>K.C.Gayathri, M. Jayaprakash</i>	
DCIA-RNG: Distributed Continual Learning based Improved Attention-Enabled Deep Learning Framework for Sentiment Analysis	268
<i>Jay Narayan Thakre, Neelu Nihalani</i>	
Gender Bias in Resume Screening using SHAP and LIME	276
<i>Namrata Khade, Bhakti Deshpande, Samarth Bondarde, Shruti Kamble, Shravani Kadu, Prema Kadam</i>	
Graph Neural Network Framework for Anomaly-based Detection and Visualization of Suspicious Bank Transactions	285
<i>Srinivas Kanakala, Bala Abhishek Udagandla</i>	
A Comparative Evaluation of Vision Transformer and CNN Models for Diagnosing Solanaceae Leaf Diseases	292
<i>Sneha Layek, Salil Batra, Arsh Mangalam, Atul Chandra, Gyan Prakash, Veena Sardana</i>	
Residual-Driven Models for Stock Market Forecasting: A Structured Taxonomy and Critical Review	298
<i>Ramana Reddy B, Shaima Karim, S. China Ramu</i>	
Millet Research: Disease Management, Crop Improvement, and Deep Learning Applications – A Comprehensive Review	306
<i>Sasi Kumar Patra, Pullela SVVSR Kumar, P.Aruna Kumari</i>	

TRACIDUS: AI based Psychological Cybercrime Mapper	314
<i>Arpith Joshua Rao P, Aakash Suresh, Joel R. B, J Thangakumar</i>	
AI Inbound Sales Agent	322
<i>Kamalesh P, Tharun R, Harish Raj A, K Kowsalya</i>	
An Efficient Tuberculosis Detection from Chest X-ray Images using Lightweight Deep Learning Models	329
<i>K.V.D.S. Santhosh, Jayadeep Pakala, Songa Manikumar, K.V Mounika, A.Lakshmanarao P.Chandra Sekhar Reddy</i>	
Hybrid Transformer and Ensemble Boosting-based Deep Learning Model for Accurate Brain Stroke Prediction	336
<i>A. Inbavalli, K. Adhitya, S. Abirama Easwaran, M. Balaji, G. Nashiha Sultana, C. Shriram</i>	
A Context-Aware Smart Wardrobe System using Deep Learning, Weather Intelligence, and Calendar-based Personalization	342
<i>Shaik Nageena Jani, Syed Naseera Banu, Marella Yaswanth Kumar, Surepalli Sampath Kumar Mekathoti Joyce Jyothi</i>	
Vision-based Vehicle Speed Estimation using Faster R-CNN and Deep Sort Techniques	348
<i>P. Dhanalakshmi, N. Narendranath Reddy, G. Sreevalli, C. Devendranath Reddy, V. Sushank Achari</i>	
GE-DFNet: An Ensemble CNN for a Multi- Modal Framework for Robust Deepfake Detection in Images and Videos	356
<i>Kondra Megha Nandi Vardhini, V Parthipan</i>	
A Risk-Driven Cyber Threat Intelligence Framework using Graph-based Analysis and Zero- Trust Sharing	362
<i>Sri Harsha Grandhi, Rudhranath Baladhandapani, Bhanutheja Nagabhushana Reddy Kasinayakanahally Biplov Paneru, T.Kalaikumaran, Elegbeleye Femi Abiodun</i>	
SkinX: A Deep Learning-based Diagnostic Platform For Symptom-based Skin Disease Prediction	368
<i>Indumathi N, Anitha Mary S, Ashika M, Daniya A, Gobiga S</i>	
OsteoNet: A Multimodal Deep Learning Model for Predicting Osteoarthritis Severity and Progression	373
<i>Nikesh D, Rahamathullah I, Manikandan G</i>	
Deep Adaptive Perceptual Generative Adversarial Network for Secure Cloud Computing and Big Data Protection to Enable Cyber Threat Prevention	378
<i>Ruba A, Monisha Priya R, Bangalore Lakshmi Roopa, Naveen G, N. Ramshankar, Kamalarajan P</i>	
Cascade-X: A Multi-Stage Causal and Emotional Intelligence Framework for Business Strategy Systems	386
<i>Gows Maithine A, David Samuel Azariya S, Dhanushraj T, Harish Madavan K M, Gokul K K</i>	
A Dual-Level Data-Driven Framework for Reducing Financial Fraud in Banking	394
<i>Nusrat Jahan, Sheikh Razia Sultana, Anika Sayeema, Sabiha Firdaus, Jannatul Maua Hashibul Ahsan Shoaib</i>	
Deep Learning–Driven Skin Cancer Detection for Equitable and Accessible Healthcare	400
<i>Shivakumar. E, M Jayaprakash</i>	
A Hierarchical Attention Network with QKV Attention for Cyberattack Detection	409
<i>M. Charitha Sri, M. Chandrika, N. Haritha, K. Bhavana, Yerininti Venkata Narayana</i>	

Explainable Employee Attrition Prediction using PCA-Optimized Random Forest and SHAP	417
<i>T. Padma, A.S. Kanishik, S. Dinesh</i>	
Automated Diagnosis of Oral Cancer using Deep Learning Models on Lesion Images	424
<i>Nihell S, Risheendra Mudipalli, Ashokkumar K</i>	
Hybrid MultiScale Pyramid Convolutional Neural Network for Land Use and Land Cover Classification	431
<i>Elumalai. M, T. Priyaradhikadevi</i>	
Skincare Recommender System with Safety-Aware Ingredient Filtering and Patch Test Simulation	437
<i>D Shanthy, Veerarenugadevi M</i>	
Hybrid NLP and Computer Vision Approach for Customized Outfit Recommendation	443
<i>J. Suji Priya, Sivashankar V P, Karthickeyan N</i>	
An Efficient Custom CNN Framework for Lung Cancer Detection with Comparative Deep Learning Evaluation	449
<i>Dharsana Dharani VG, Charumithra C, Trishna R, Dharhani c</i>	
RustGuard: A Compile-Time Verification Framework for Memory Safety in Distributed Rust Applications	455
<i>V. Prasanna Srinivasan, Aksaya Dharani K, Pramila K, Preethi Wilson G, Naveen G, N. Ramshankar</i>	
Automated Dry Eye Disease Detection using Smartphone Ocular Imaging with Swin Transformer-based Deep Learning	461
<i>Sathishkumar R, S. Ashok Kumar, S. Jayamoorthy, Rooban A, Mujeebur Rahman H, Arul Chinnas J</i>	
Toward Quantum-Enhanced Privacy in Medical Data Analytics: A Framework for QOTP-based Secure Computation	468
<i>Gohin B, M Ramabhadra Rao, K Lakshman Rao, Suresh Chanamala, R Sunitha, Y S Swarupa</i>	
A Fine-Grained Multilingual Code-Mixed Dataset for Sentiment Analysis with Opinion Holder and Trigger Annotation	475
<i>Elijah Francis, P Praveen</i>	
RHNet: Design of Residual Hybrid Network for Traffic Volume Prediction with Object Detection and Tracking Procedures from High-Resolution Aerial Images	483
<i>Syed Reshma, G Rosline Nesa Kumari</i>	
SCHEMEFORGE-AI: An Intelligent Framework for Automated Scheme Analysis and Recommendation using Artificial Intelligence	495
<i>Niventh P, Vijayalakshmi N, Swathi G, Pavithran K, Prasanth B, Jeyaram G</i>	
Machine Learning based Obstetric Health Prediction and Care System	504
<i>A. Suhana Nafais, T. Harini, V. Vinotha</i>	
Adaptive Cloud Resource Management using IBI Logic and Learning-based Optimization	514
<i>Subash Chandra Tripathy, Suvendu Chandan Nayak, Rekha Sahu</i>	
AI-Driven Outcome Assessment and Personalized Feedback Framework in Higher Education LMS	522
<i>P. Tamilselvi, S.P. Bhargav, S. Hariharasudhan, S. Om Prakash</i>	
An Explainable Deep Learning Approach for Pneumonia Detection from Chest X-Ray Images using EfficientNet-B0	530
<i>C.Sivamani, T.SriRagavi, N.Shanmuga Sundar, R.Aishwarya, N.Nithish</i>	

Context-Aware Pervasive Computing Framework for Intelligent Smart Space Environments	536
<i>Lalit Sachdeva, Priya Vij</i>	
Smart Learning or Smart Risks? AI in Indian University: A Systematic Review	543
<i>Shrikant Upadhyay, Neetu Anand, Kumar Gaurav, Binita Roshima Hinz, Binod Kumar, Sampurna Mandal</i>	
Deep Learning-based Social Intelligence Model for Adaptive Human–Computer Interaction	549
<i>Aakansha Soy, Roohee Khan</i>	
Literature Review on Neural Networks based Security in Multimedia with Application and Emerging Trend	556
<i>Yashaswini K, Sharath M N</i>	
A Trustworthy Framework For Early Chronic Kidney Disease Prediction using Explainable Machine Learning	561
<i>Pothuraju Raju, Arasavilli Kusuma, Maddula Prasad, Raja Rao PBV, Shalem Raju PJR Pokkuluri Kiran Sree</i>	
EMO-GUIDE: Emotion-Driven Interactive Chatbot for Mental Well-Being using FSM-based Dialogue Control	567
<i>Subasri N, Mouthami K, Sharli Iris John Baskar, Devatharshini S</i>	
Multimodal ResNet-based CNN for Early Autism Spectrum Disorder Detection and Severity Stratification	575
<i>J. Suji Priya, R. Karolin, T M. Harini</i>	
A Review of AI-Driven Chatbots for Mental Health Support: Technologies, Applications, and Ethical Concerns	584
<i>Lekkala Abhinay Reddy, Satya Sri Manikanta Ravi Kumar Akula, Cheekatla Himasri Phani, Pardeep Kumar</i>	
Comparative Analysis of Machine Learning and Deep Learning Techniques for Eye Disease Prediction and Diagnosis	590
<i>N. Manjunathan, Y.Naga Kousika, M.Vivek Reddy</i>	
Attention-Guided Acoustic Normalization of Parkinsonian Dysarthric Speech with Cross-Vocoder Evaluation	596
<i>Sneha P M, Vinodhini K, Justin Dhas Y</i>	
Smart Internship Recommendations for PM Internship Scheme	603
<i>Sudharsan V, Vishal P, V.R.Sadasivam</i>	
AgriConnect: An AI-Powered Smart Farming Ecosystem Integrating Farmer Networking and Plant Disease Classification	609
<i>Anant Singh, Mukesh Lomror, Richa Singh, Ashish Kumar, Aryan Singh, Prakhar Somvanshi</i>	
Recent Advances in Automated Lung Cancer Diagnosis in CT Imaging: A Comprehensive Survey of ML and DL Techniques	615
<i>N. Penchalaiah, Kancharla K Chaitanya</i>	
Performance Evaluation of Machine Learning Models on Extremely Imbalanced Financial Data: A Comparative Study	624
<i>Reitumetse Anacleto Muso, Salil Batra, Himanshu</i>	
Auditory Landscape Identification of Endangered Bird Species using Hybrid Deep Learning Approach	631
<i>Ramachandran Vijayarani, G. Karthika, S. Manjineeshwari, I. Sandhya</i>	

Comparative Study of Deep Transfer Learning Models for Classifying Different Types of Diseases in Paddy	638
<i>S. Vinoth Kumar, G. Prashanth Kumar Reddy, Y. Venkata Sudheer</i>	
Explainable Artificial Intelligence for Loan Approval and Credit Risk Assessment: A Comprehensive Review	644
<i>Velusamy A, Mohamed Musthaba S M, Mukuntharaajhan A, Nandhagopal K, Prabhu R, Kaniyarasu K</i>	
Learning-Driven Job Recommendation Systems: A Comprehensive Review of Deep Semantic, Transformer-Enhanced, Ontology-based and NLP-Bidirectional Approaches	650
<i>Velusamy A, Aishwarya S, Chellam N, Devipriya R, Prabhu R, Vasudevan I</i>	
A Feature-Aware Dynamic Slimming Approach for Lightweight Deep CNNs in Medical Image Analysis	656
<i>Jyoshna Rani Koti, V. Vijayalakshmi, G. Zayaraz, Raveendranadh Bokka</i>	
FedGuard: Federated Network Intrusion Detection with Differential Privacy, Byzantine Fault Tolerance, Concept Drift Awareness, and Zero-Day Threat Response	664
<i>Iniyavan R, Gopinath S, Hemamalini R, Lakshmi M</i>	
A Real-Time Automated CCTV Emergency Detection System using Dual-CNN and ViT-B/16 Hybrid Architecture for Multi-Event Classification	672
<i>S. Venkatesh, P. Praveen, Akella S. Narasimha Raju</i>	
Edge-Intelligent Deep Learning Framework for Real-Time Anomaly Detection in AI-Enabled Internet of Things Systems	678
<i>Kavitha K N, Saranya M, Arun Balaji P, Ramya R, N.Sathiya, S.Sumathi</i>	
A Review on Hybrid AI Framework for Malware Detection using API Call Behaviour Analysis	686
<i>K. Hari Priya, Murala Yeshwanth Paul</i>	
Adaptive Channel Learning for Early ADHD Prediction using Attention-based EEGNet	693
<i>Krithiga R, T. Thilagam, Siva Rama Lingham N</i>	
Deep Learning-based Smart Traffic Signal Control	700
<i>T Thilagam, Siva Rama Lingham N, T Praveen Kumar, Ritish Patro</i>	
Ransomware Threats and Machine Learning-based Detection: A Review	706
<i>K.Karpagalakshmi, M.Guru Vimal Kumar</i>	
Extractive Summarization using TextRank with FastText Word Embedding and Cosine Similarity for News Summarization	714
<i>Subhan Subhan, Novita Ayu Indirawati, Yahya Nur Ifriza</i>	
Physics-Guided Multimodal Foundation Models for Context-Aware Precision Crop and Fertilizer Recommendation under Climate Variability	720
<i>Navaneetha Krishnan Muthunambu, Ruthran G, Seetharaman A, Surya K</i>	
Comparison and Analysis of Dynamic Comparator using Lector and Galeor Techniques	727
<i>M. Raju Naik, P. Somasundari, Shrikant Upadhyay, Ankita Lakra, Rakesh Kumar, Binod Kumar</i>	
Deep Learning for Sustainable Engineering in Environmental Climate and Ecosystem Monitoring: A Comprehensive Review	733
<i>Simar Singh Rayat, Manisha Aeri, Susheela Dahiya</i>	

Stroke Prediction Systems: A Comprehensive Review of Machine Learning, Medical Imaging, and Blood Biomarker Integration	739
<i>Saurabh Dhanik, Mukesh Joshi, Naveen Tiwari</i>	
Detecting and Mitigating Bias in Resume using Machine Learning Algorithms	746
<i>A. Suhana Nafais, G.J. Sripriya, M. Subitson</i>	
CityPulse 360 – AI-Powered Real-Time Urban Happiness and Sentiment Analysis	753
<i>Sai Charan Naidu P, J Naveen Krishna, A Akash, J Vijayarani</i>	
Flash-DiT: Instruction-Tuned Image Synthesis using Parallel Multi-Head Feed-Forward Diffusion Transformers	761
<i>R. P. Narmadha, Jeevasankar V, Muhammed Mishal, Abinesh M</i>	
FACDA: Federated Learning-based Autonomous Cyber Defense for Edge–Cloud Systems	767
<i>Prajwalasimha S N, Dilip Kumar Jang Bahadur Saini, Sahana G, Yeddula Likith Neeraj Reddy</i>	
Hybrid Fuzzy–Deep Neural Network Framework for Accurate and Interpretable Hindi Text Summarization	775
<i>J Anitha, Balajee Maram</i>	
Entity Guided Natural Language Generation for Targeted Review Summarization	782
<i>Prachi P, Malavika T, Mahendran P, M. Rajkumar</i>	
Wisperina: A Scalable Web Application for Speech-to-Text, Diarization, and Emotion Recognition	788
<i>Pratik Mathur, Manaswin Manoj, Fathima Feva.K, Sharon Thomas, Hanumanth Sastry Sistla Bhuvana Mohini T N</i>	
Autonomous Emotion-Improvement Agent with Dynamic Tool Generation via Model Context Protocol	796
<i>Varshaa SV, S Sharanya</i>	
An Efficient Preprocessing based Transfer Learning Approach for Multi-Plant Disease Recognition	802
<i>Vijaya Bhasker Reddy, S. Satheeskumaran</i>	
Improved SqueezeNet Framework for Early Heart Disease Prediction with Normalized Dataset	809
<i>Shamili V, S. Jancy</i>	
An LLM Enabled Educational Platform with Feedback Loops to Enhance Learning	816
<i>Sruthy Anand, Arjun U, Sethuraman N. Rao</i>	
Deskmate AI: Voice Driven Desktop Assistant	823
<i>Shubham Balgude, Rudra Madhavi, Trishna Jaiswar, Anu Malhan</i>	
Analysis of Digital Twin Ecosystem for the Renal System: Improving Patient Outcomes in Chronic Renal Disease and Dialysis Need Prediction	832
<i>A. Jaya Mabel Rani, Raed Alazaidah, V. Samuthira Pandi, Balpreet Singh, J. Alekhya, R. Ruth Shobitha</i>	
A Hybrid Intelligent Framework for Secure and Adaptive Task Scheduling in Cloud Systems	838
<i>Madhusudan S, Muthu Kumar B</i>	
Improving the Classification Accuracy of Semi-Supervised Learning YOLOv11-Fixmatch using Exponential Moving Average on Stomata Type	845
<i>Nur Fadilla Utami, Indrabayu</i>	

An NLP-based Hybrid Recommendation System for Solving the Cold-Start Problem in Student Marketplaces	852
<i>Nikhil, Lakshay Parashar, Parul, Anant Kumar Jayswal</i>	
AI based Hybrid System for Cattle and Buffalo Breed Identification	858
<i>Mathivanan P, Hemanth G, Kishore L, Pavithra T</i>	
Improving Groundwater Quality Assessment through Gradient Boosting Approaches	864
<i>N.Prakash, N.Dharshika, P. Anitha, R.Geetha, P.Kalyanasundaram, J.K. Kanimozhi</i>	
AI-Powered YOLOV12 based Temporal Motion Analysis for Industrial Safety Behavior Monitoring	870
<i>Praveen Sekar, Vasanth V.K, Tamilselvan V. S, Venkateshwaran.K</i>	
An Optimized Deep Learning Approach for Fraud Detection in Financial Transaction	876
<i>Bhawna Mallick, Sivaneasan Bala Krishnan, Amit Goel, Prasun Chakrabarti</i>	
A Secure and Scalable Hybrid Framework for Decentralized Intellectual Property Governance	884
<i>Mr.S Sreeraj, Apsal Jamal S</i>	
A Retrieval-Grounded Multi-Agent Framework for Intelligent Personalized Itinerary Planning	891
<i>Kousika N, Arun Raj E</i>	
Enhanced Postpartum Depression Prediction using a Hybrid Machine Learning Approach	898
<i>S Annapoorani, AShobanadevi, Praveena Anjelin, J Dhanalakshmi, T Veeramakali</i>	
Dual-Stream Deep Learning for Non-Invasive Anemia Detection from Conjunctival Images	904
<i>S. Annapoorani, A. Shobanadevi, M. Geetha Jenifel, T. Veeramakali</i>	
Geo-Contextual Information Extraction and Summarization System using NLP and Large Language Models	910
<i>B. Krishnakumar, Rajesh Kumar G, Malathi Eswaran, Vikkram R, S Sadesh, T. Kumaresan</i>	
Deep Learning Ensemble with Attention Mechanisms for Autism Spectrum Disorder Detection from Facial Images	917
<i>Sarita Kushwaha, Rajeshwar Sharma, Lovely Suman</i>	
An Intelligent Real-Time Ocular Health Monitoring System for Digital Wellness and Preventive Healthcare	924
<i>Vanathi.P, Renuka.S, Sasmitha.S</i>	
Edge Computing-based IoT System for Real-Time Environmental Monitoring and Decision Making	931
<i>Kanmani. K, D.Sathyanarayanan, P.N. Periyasamy, Samson Ebenezer Uthirapathy, Moorthy Agoramoorthy S. Parthiban</i>	
Deep Learning Enhanced Hyperspectral Imaging for Real-Time Waste Classification	937
<i>G. Rohini Phaneendra Kumari, P.Srividya, K.Sai Vighnatha, K.Abhi Varshini, M.Prashmita, Dr.A.Naresh</i>	
A Novel Method for Text Emotion Detection using EmotionXLNet for Improving Accuracy in Comparison with BERT	945
<i>Latha B, Premalatha S, Devabharathi V, Dhivya S, Harish G, Kabish Kumar K</i>	
A Study on Paddy Disease Detection using YOLOv5 Object Detection Model	951
<i>M. Sumathi, I. Rexiline Sheeba, I. Domilin Shyni, Eddala Charan, M. A. Muthiah</i>	

PGT-GAN: Privacy-Gradient Tabular Generative Adversarial Network	957
<i>S. Moses Dian, R. Indhumathi</i>	
Classification of Breast Histopathology Images using Color Deconvolution and DenseNet Architecture	964
<i>M.Kusuma Sri, K. Purushotham, K. Sasikala, A. Senthil Kumar, P.Subbaraju</i>	
TrustFit: Uncertainty-Aware Explainable Virtual TryOn System for Online Apparel Shopping	970
<i>Ms.K.Arthi, Deva Dharshini P, Harini G, Muthu Aiswarya M, Vasundhara K</i>	
Anomaly Detection in Industrial Machine Time Series Data using Machine Learning Technique	976
<i>Bikey Kumar Shah, Rakesh Kumar Lodhi, Rakesh Kumar Tiwari</i>	
PrepMate: A Multi-Stage Transformer-based Framework for Automated Interview Preparation and Semantic Response Evaluation	981
<i>D. Shanthi, N. Shalini, G. Shivani, S. Subhashininachiar, S. Vidya</i>	
High Utility Pattern Mining in Certain Data with Advanced Filtering Strategy	988
<i>Chaitali Patil, Sunita Dhotre, Dhanashree Patil</i>	
Enhancing Online Education Through Cloud Computing Technologies	996
<i>Shaik Salam, Poojitha Tiruveedhula, B. Sai Bharath, Bandi Pavani</i>	
Intelligent Network Intrusion Detection for IoT Devices using Semi-Supervised Learning and Random Forest	1003
<i>K.Chandrakumari, R.K.Kavya, PC.Godlina, A.Sultan Saleem, V.Sriram, G.Selva Cyril</i>	
MogaNet Classification Model to Classify Alzheimer's Disease from MRI	1010
<i>Anitha T, Jesu Jayarin P, Rajendran Thavasimuthu</i>	
An MRI-based Alzheimer's Disease Classification Model with Swin Transformer	1018
<i>Anitha T, Jesu Jayarin P, Rajendran Thavasimuthu</i>	
An MRI-based Alzheimer's Disease Classification Model using VOLO-D5	1027
<i>Anitha T, Jesu Jayarin P, Rajendran Thavasimuthu</i>	
MediBridge – Smart Medication Management and Digital Health Card System	1036
<i>Raimee Madhuri Shukla, Adhikari Bhavishya, Bhanu Sri Gijnupalli, Gurupriya M.</i>	
TamOCR: A Lightweight LLM-Assisted OCR Framework for Digitizing Tamil-Brahmi Inscriptions	1043
<i>K Saranya, S R Nitthin Kumar, R Praveen Kumar, S Arun Nivesh</i>	
Automated Data Contract Validation in Multi-Vendor Procurement Ecosystems	1049
<i>Ugala Matta</i>	
A Hybrid Deep Learning Framework for Real-Time Urban Flood Prediction Using Multi-Source Geospatial Data	1057
<i>Sathiyamoorthy M</i>	
Quantum-Resilient Cryptography and Safe Guarding Post Quantum Cryptographic Protocols Against Quantum Threats	1063
<i>S Hemajothi, Keerthana B, Janani R, Farzana E</i>	
An Ensemble Machine Learning Approach for Imbalanced Brain Stroke Prediction	1069
<i>R. M. Sakthivel Suriya, V.S. Adithyan, Ramkiran B, Pavithra M, Vijayabhaskar B</i>	

Deep Learning based Corn Leaf Disease Detection using Edge AI	1076
<i>S.Santhi, Shanthi K G, Ponni Alias Sathya, Dhivyasri.R, Satheesh Kumar.K, Srimathi.D</i>	
Research Travelogue on Causal Data Mining Approach to Study the Inter-Relationship between Cardiovascular Diseases and Renal System Failure	1083
<i>B Rama, D Ramesh, K Vamshi Krishna Reddy</i>	
A Deployment-Oriented Explainable Hybrid Attention-based Deep Learning Framework For Large-Scale Rice Variety Classification	1091
<i>R.M Ganesh, A.Ajeeth, Parasa Gopi Nanda Kishore, Chintha Dushyanth, Mekala Bharath Kumar Panditi Praveen</i>	
Offline Photo-Shield Automatic System for Finding and Redacting Privacy-Sensitive Information in Images	1097
<i>Sandhya B Shettnavar, Shefali Sharma, Aswathy J S, Kaluvayi Sai Rakshitha, Karthika R</i>	
An Adaptive Encryption-Inference Two-Layer Security Algorithm Framework for Scientific and Technological Achievement Databases	1103
<i>Wang Jinsong</i>	
Cross-Layer Cooperative Scheduling and Supply Chain Optimization via Distributed Sensor Network-based Information Fusion	1110
<i>Ma Yumei, Pinyi Yao, Lu Xueqin</i>	
Dynamic Brain State Modeling using Switching Linear Dynamical Systems for Robust Bipolar Disorder Classification	1118
<i>Ch. Raga Madhuri, G.Anuradha, G.Madhavi</i>	
Moringa Leaf Quality Grading Prediction using Deep Learning	1125
<i>Asina Begum, Ajeeth Kumar, Mohammed Rahees V A, Jithin Rajan, Nanda Gopan K, Basil Varkey</i>	
Cyber Attacks on Real-Time Internet of Things: A Comparative Analysis of Algorithms using Data-Driven Prognostic Algorithms	1132
<i>Fouad Sleiby, Ahmed Abdou, Feras Abdeen, Mohammad Shakarnah, Mohammad Kouali Khaled AlQawasmi</i>	
Random Forest based Predictive Vehicle Breakdown Management System for Intelligent Roadside Assistance	1139
<i>G.Mariammal, Gnana Moorthi P, Jona Jebarson J, Dhayaa Nidhi A, Arulkumaar K</i>	
SmartEyeX: An Explainable Deep Learning System for Multimodal Retinal Disease Detection	1148
<i>N. Sunanda, V Susmitha, A Dinesh Reddy, B. Meghana, B Venkateswara Rao, S Avinash</i>	
AI-based Early Alzheimer's Disease Detection using Deep Learning	1156
<i>Pavithra E, Kathirvel R, Subramani P, Sivapraveen R, Sivasurya S</i>	
Gaze Pattern Analysis for Early Autism Spectrum Disorder Screening using Real-Time Computer Vision	1164
<i>Vetri Selvi. V, Mukesh.S, Sijith.R, Dinesh.K, G.Emayavaramban</i>	
GOHBO-XAI: Trustworthy Clinical Image Classification with Hybrid Bio-Inspired Optimization and Uncertainty-Aware Explainability	1171
<i>Anjali Markala, Sai Teja Ale, Harshal Medishetti, Vivek Chukagotla, Revanth Sai Thota</i>	

Explainable Deep Learning-based Medical Image Analysis Framework for Early Disease Detection Supporting Sustainable Healthcare	1180
<i>Saveetha.T, R.Ramya</i>	
Intelligent Half Respirator for Real-Time Environmental Risk Monitoring and Alert System	1187
<i>Latha M, Sai Sri Nithi N B, Sangeetha P, Saraniya M R</i>	
Spatially Coherent Extension of MQDM for Hourly Future Climate Time Series	1193
<i>B.Mounica, Pasham Rithwika Reddy, Mohammad Rokhayya Reshma, Kondapuram Shivaprasad Reddy Surkanti Sandeep Kumar Reddy</i>	
Multimodal Framework for Detecting Malicious QR Codes in Social Engineering Attacks	1201
<i>Konda Hari Krishna, Patnam Ravi Kumar, V Herah, Kopparthi Jwalapti Suhas Reddy Ponnolu Vishnu Vardhan Reddy, Naresh Babu Kondapavulur</i>	
Hybrid Ensemble Deep Learning Framework with Feature Optimization and Explainable AI for Coronary Artery Disease Detection	1207
<i>N.V.Chinnasamy, A.Venkata Kavyasree, C. Sanjay, C. Pranay Krishna, D. Gnaneswar</i>	
AI and Quantum Machine Learning based Health Risk Prediction using Wearable Sensor Data: A Survey	1215
<i>Ayain John, Abhishree M, Gahana M N, Ningamma Gogi</i>	
Sparse Grassmann LLM: Grassmann-Flow Mixing with 2:4 Structured Sparsity for Edge-Device Language Modelling	1221
<i>Adithya MS, Nachiketa Mishra</i>	
Explainable Graph Attention Network for Autism Spectrum Disorder Diagnosis using Resting-State Functional Magnetic Resonance	1228
<i>Sucharitha Gowdiperu, Sheshikala Martha</i>	
A Comprehensive Review of Hybrid CNN-Transformer Architectures for Semantic Segmentation in Urban Remote Sensing Imagery	1234
<i>L Viswajit Reddy, Padmavathi Vurubindi, Ravi Uyyala</i>	
Metaheuristic-Optimized Explainable Deep Temporal Networks for ALS Detection: A Systematic Literature Review	1243
<i>Sandela Naga Sharanya, Neetu Prasad</i>	
StormNet: A Hybrid Deep Learning Framework for Accurate Multi-Day Storm Forecasting using ERA5 Reanalysis Data	1249
<i>Ashutosh Sharma, Priya S, Rishiraj Rath</i>	
A Joint Stress Index for Multi-Level Tomato Leaf Stress Grading using Feature Fusion from RGB Images	1254
<i>Jeyapandian Munisamy, Durga Karthik</i>	
OkraSqueezeNet: A Lightweight CNN with Bayesian Optimization for Real-Time Ladies Finger Leaf Disease Detection	1258
<i>R. Renugadevi, Divyasri M, Rithikaa K, Siby R</i>	
Predictive Modelling of Thyroid Hormone Dynamics using Time-Series Analysis	1264
<i>S.Kalimuthu Kumar, Girraju Giri Charan, Kethepalli Gokul, Vasavi Raparathi, Devireddy Indu</i>	

Real-Time Vision-based Vehicle Speed Estimation using YOLOv8 and Enhanced Deep SORT	1270
<i>P. Dhanalakshmi, S.Lakshmi Narayana Reddy, Shaik Baji, S.Mohammed Saleem, T.Chethak Sai Kumar G. Sreevalli</i>	
POCXNet: Pufferfish Optimized CheXNet for Pneumonia Detection using Chest X-ray Images	1276
<i>Kunte Noor Fathima, Renukalatha Shivrudraiah</i>	
A Study on Cosine Similarity based Recommendation System	1284
<i>Minakshee Patil</i>	
Automated Machine Learning with TPOT for Predictive Soil Fertility Modeling	1290
<i>Janmejay Pant, Hitesh Kumar Pant, Priyanshi Kotlia, Devendra Singh, Praveen Kumar Joshi Himanshu Pant</i>	
Smart Endpoint Defensive for Infrastructure Networks by Supervised Learning Strategies	1296
<i>Reshma K, Aswani P, Shishira M C, Nitha T M, Nivin Padaveetil, Nakul Krishnan M M</i>	
AutoEval:An Intelligent Framework for Automated Evaluation of Handwritten Descriptive Answer Scripts using OCR and NLP	1304
<i>Aswathy S, Abin Elcitta Saji, Chanchal H Das, Sachin Vijay, Sreenath K, Satheesh Kumar</i>	
SoulConnect: An AI-Powered Emotion and Mind Wellness Platform	1309
<i>Anjana Vijay, Rejina Mol K R, Pranav T Varshan, Roshan P M, R. Satheesh Kumar</i>	
Department Visitor Assistance System with Augmented Reality Navigation	1315
<i>Karthik Viswanath, Salvin Siju, Leo Philip, Jyothi Maria, Anly Antony M, Satheesh Kumar R</i>	
A Rule-based Reward Optimization System for Integrating E-Commerce Transactions with OTT Content Consumption	1323
<i>Prajyoti DSilva</i>	
Design and Implementation of an AI-Enhanced Collaborative Code Editor using CodeBERT	1328
<i>K. Dhanalakshmi, M. Siva Bharathi, S. Siva Ranjani, R. Yazhini Priyaa</i>	
EHF-Net: A Multi-Scale Dual-Attention Network for Seven-Class Bone Fracture Detection	1337
<i>Charles Jaya Rao Nettem, K B V Rama Narasimham, M. Ashok Nagasai, S. Vijaya Lakshmi, Jaideep Gera Praveen Tumuluru</i>	
Recurrent Neural Networks for Forecasting Rice Sheath Blight Incidence from Meteorological Data	1344
<i>Sonu Varghese K, R Satheesh Kumar</i>	
Hierarchical Temporal Memory Recurrent Transformer Framework for Monocular 3D Object Detection in Video Sequences	1350
<i>R. Ravi, P. Dhanalakshmi, Sivaraman V, D. Yobu, Dr M Rajaram, G.Ganesh Kumar</i>	
A Real-Time Adaptive AI based Traffic Management Framework for Ambulance Priority	1357
<i>V. Devi, Satheesh Kumar D, Ganapathi M, Rishidharan G, Thirumalaivasan R, Thulasi Srirami K</i>	
Skin Lesion Segmentation and Cancer Classification using U -Net and Vision Transformer Models	1361
<i>Shantini K, Shalini V, E Ahila Devi</i>	
AI-Powered Real-Time Crowd Behavioral Anomaly Detection with Alert Sound System	1365
<i>V.Devi, D. Satheesh Kumar, Kesavarthini S, Rithika M, Sanjo A, Varshini S</i>	

An Optimized Swarm Intelligence-based Deep Recurrent Network Framework for Cloud-Enabled Intrusion Detection in Cybersecurity Environments	1370
<i>Keerthana. A, T. Priyadarshikadevi</i>	
Cloud-based Intelligent Brain Tumor Detection and Segmentation Framework using Hybrid Deep Representation Learning Approach	1376
<i>K. Anitha, T. Priyadarshikadevi</i>	
Investigation of FEC Block Latency and Jitter in High-Speed Ethernet under Mixed Packet Workloads	1383
<i>Sivakumar Ashokkumar</i>	
Quantum-Resistant Cryptographic Framework for Secure Localization in Wireless Sensor Networks	1389
<i>K. Bhadrachalam, B. Lalitha</i>	
Temporal Connectivity Estimation to Improve the Reliability of Maritime Fishing Vessel Networks	1398
<i>Sruthy Anand, Sethuraman N. Rao, Maneesha Vinodini Ramesh</i>	
A Compact 2x1 MIMO Antenna with Neutralization Line for Improved Isolation in Wireless Communication Systems	1406
<i>Sathish M Professor, Nivedha J, Poojitha M V, Preneshiya V</i>	
Secure Cloud-based File Storage System with Enhanced Data Integrity and Access Control	1412
<i>Kuldeep Kumar Chauhan, Rushan Gupta, Nishant Kumar, Simran</i>	
Development of an ATE based Optimized Test Program for Nand Flash Memory Validation	1419
<i>Dr.R.Gowrishankar, Nithin Kamalesh M, Sachin G, Senthilkumar Dhamodharan</i> <i>Kalyana Sundaram Chandran</i>	
Robot for Sanitizing Hospitals with Patient Assistive Technology	1425
<i>Raahena.S, Rejith.V.P, Sandeep Raj. V, A. Asha</i>	
IoT-Enabled Multi-Sensor Patient Health Monitoring System for Real-Time Hospital Tracking and Display	1434
<i>Dhaarani T G, Dhaarani T, Divyadharsan S, Kavinila C</i>	
An Integrating Energy-Efficient Adaptive Fuzzy Control for Smart Grid Applications	1441
<i>Akhil Chowdary Chalasani</i>	
UAV-based Clove Maturity Detection using YOLOv11n with Adaptive Gamma Correction and Histogram Equalization	1448
<i>Dewi Armayasari, Indrabayu</i>	
Suspicious Transaction Detection in Financial Institutions using Hybrid Ensemble Learning Classifier	1456
<i>M. Ravichandran, Tamma Raja Vamsi, P.S.D Sai Kumar</i>	
Lightweight Edge based Anomaly Detection Framework for Real Time Industrial IoT Monitoring	1462
<i>A. Jerrin Simla, Hayel Khafajeh, N Krishna Chythanya, Varalatchoumy M, S.Agnes Shifani, Ramya M</i>	
A Smart Wireless Power Transfer System for Automated Guided Vehicles (AGVs) with Real-Time Efficiency Tracking and Coil Health Diagnostic	1468
<i>J. Priyadarshini, S. Mohana Sundaram, M.s. Nandha Kumar, P. Regan Rossario</i>	
Deep Dreaming Driven Plant Disease Detection and Diagnosis in Agriculture: Visual Feature Amplification and Explainable Deep Learning	1475
<i>V.Kalaipriya, Vigilson Prem M, Manisha G, T.Thilagam</i>	

Intellitrafic: Traffic Monitoring Flow and Signal Optimization based on AI	1483
<i>Shruti Bhardwaj, Shobhit K Sharma, Deep Kumar, Saloni Gupta, Sagar Sharma</i>	
Optimized Cluster Head Selection with Enhanced Energy Efficiency	1490
<i>D. Angeline Ranjithamani, R. S. Rajesh, Christo Ananth</i>	
Blockchain-Enabled Decentralized Recruitment Platform with Verifiable Credentials and Privacy-Preserving Hiring	1497
<i>Vishal Sharma, Akshay Sharma, Ansh Kumar, Abhishek Raj, Harsh Gautam, Saksham Rana</i>	
Privacy-Preserving Personalized Federated Learning for Heterogeneous Intrusion Detection Systems	1504
<i>Chinmay Patil, Omkar Parab, Rasika Joshi, Suhas Waghmare Guide</i>	
A Privacy-Preserving Federated Autoencoder for Unsupervised IoT Network Traffic Representation Learning	1512
<i>Shikha Khullar, Chennaiah Kate, Kantimahanthi Padmaja, Prashanth Kumar Ravula A.Hyils Sharon Magdalene, S. Kaliappan</i>	
Secure and Optimized Cyber-Physical Architecture for Smart Grid and IoT-Enabled Energy Systems	1519
<i>Anjali Goswami, Anjali Krushna Kadao</i>	
RE-FIDS: Robust and Explainable Federated Learning-based Intrusion Detection System	1527
<i>Pranav Prajapati, Atharva Karambe, Ruchi Kharab, Nilesh Mane, Parikshit Singh, Sunita Dhavale</i>	
A New Approach for Intrusion Detection System Classification using Ensemble Learning	1535
<i>Meenavolu S.B Kasyapa, G. Raja Vikram, P. Supriya, M.Sharath, G. Ganga Sagar, R. Sai Vivek</i>	
EEG and ECG Signal Classification using Chaos-Theoretic Features and Machine Learning Models	1542
<i>Shivaranjani S.S, Sindhu P. Menon</i>	
Machine Learning-based Outlier Detection in IoT Wireless Systems	1548
<i>M Shankar, K Dinesh, K Bharath Kumar, G Ajay, A Amareshwara, M Arif Mohammed</i>	
Content-Centric Opportunistic Networking: A Simulation-based Comparative Study of DTN Routing Protocols for IoT Applications	1554
<i>Aurobindhou S, Jayakumar D, Ramkumar M O, Inbavalli A, Rajmohan R, Apshaara Banu K</i>	
AI-Integrated Multi-Sensor Wearable System for Continuous Physiological Monitoring and Anomaly Detection in Elderly Care	1560
<i>Lhakshanaa V, Mervin Paul M, Mirudhula S, Pranesh S A, Karthikeyan A</i>	
Multi-Scale Adaptive Fusion DenseNet for Robust Diabetic Retinopathy Severity Assessment in Pervasive Telehealth Systems	1566
<i>Jhaishnavi Saravanan, Rohit Chandramohan, Y. Justin Dhas</i>	
Listening to the Planet: A Distributed IoT Fabric for Long-Term Environmental Intelligence	1573
<i>Dhivakar K, M. Jayaprakash</i>	
An Entanglement-Assisted Quantum Cryptographic Framework for Autonomous Satellite Networks and Interplanetary Communication	1581
<i>M. Sangeetha Priya, Aswathy R H, V Sheeja Kumari, R. Ganapathi Raman</i>	
Sensing Before Failure: A Predictive IoT Architecture for Resilient Infrastructure Systems	1589
<i>Savitha N, M. Jayaprakash</i>	

Smart Portable Chest Worn Respiratory Device for Continuous Health Monitoring	1596
<i>Tryphena Prishiba P, Harish I, Manishdharshini K, Monika S</i>	
Analysis of Silicon Nanowire FET and CNTFET for Biosensing Applications	1601
<i>Gopinath.P.G., Chandra Sekar P, Vijayaprabhu A, C Priya</i>	
Subject-Level EEG-based Classification of Parkinson's Disease using Multi-Domain Feature Fusion	1607
<i>Arsh Khan, Ayush Ahlawat, Nidhi Mishra, Shuchi Mala, Shailendra Kumar Singh</i>	
A Hybrid Energy Management System for Solar PV-Battery Fed BLDC Motor Drive with Seamless Mode Transition	1615
<i>Dipali Bamane, Sneha Patil, Swapnil Gadgune</i>	
Attention-based Explainable Deep Learning Latent Representation for IoT Anomaly Detection	1621
<i>Soundhar S, Maryamariyal P, Kamali R, Divyapriya B</i>	
IoT Enabled Contaminated Food Detection in Warehouse Storage	1629
<i>M. Kavitha, Kavitha B.C, Pallavi Singh, Dr.P.Sankar, A.Pavan Venkata Durga Prasad</i>	
Blockchain-Enabled Trust and Authentication Model for Social Cyber-Physical Systems	1636
<i>Anjali Goswami, Anjali Krushna Kadao</i>	
Wearable Companion Robot for Assistive Support	1644
<i>Prasanna Raj C, Sai Kumar R, Robinson J, Chitra S</i>	
IoT-Driven Smart City Analytics Dashboard with Multi-Layer Data Security	1651
<i>Tummala Adithya Reddy, Aravind Sajith, Dittakavi Akhila Chinmayee, Shankar Nalinakshan</i>	
Adaptive Quantum-Integrated Access Control Mechanism for Protecting LoRaWAN Against Emerging Quantum Threats	1659
<i>J. Sebastian Nixon, M Shahina Parveen, Kumar Dilip, Dilip Kumar Jang Bahadur Saini, Smita Nirkhi Rajesh L</i>	
Improving Avocado Detection in Isochromatic Foliage using YOLOv11 and Piecewise Linear Contrast Stretching	1664
<i>Neneng Suyeni, Indrabayu</i>	
A Comprehensive Review of Modern Compiler Design Paradigms	1672
<i>Simar Singh Rayat, Sujal Thapa, Manisha Aeri</i>	
DIARA: Optimized Resource Allocation for URLLC and mMTC in 6G Networks	1678
<i>N C A Boovarahan, T Lakshmibai, T Dinesh Kumar, R.Sivaramakrishnan, M.A.Archana, S. Omkumar</i>	
Efficient Energy Recovery in Electric Vehicle using Regenerative Braking with DC-DC Converter	1686
<i>John Blesswin G, Bharani Prakash T</i>	
An IoT-Enabled Crop Recommendation System using Mathematical Feature Modeling and Fuzzy Ensemble Learning	1692
<i>S Jayashree, A Amarnath Shanker, V Ram Manohar Reddy</i>	
Intelligent Multi-Source Data Fusion for AI-based Precision Crop Recommendation using Soil, Environmental, and Market Intelligence	1698
<i>S.Vinoth Kumar, E. Rama Seshu, G. Guru Gopi Pavan Harsha Vardhan</i>	

A Comprehensive Analysis of MIT App Inventor in Research and Education: A Bibliometric Review from 2015 to 2024 via Google Scholar	1705
<i>M. Padmapriya, P. Ganesan, M. Easwaran, V. Elamaran, G. Sasi, R. Santhi</i>	
Cross-Layer Reinforcement Learning for Energy-Aware Resource Management in IoT Gateway Systems	1711
<i>Kumaran K, Nandhini Raaj, Tholeti Sai Krishna, Sowmithri Sriram</i>	
Design of 4-bit Baugh Wooley and Array Multiplier using Verilog	1718
<i>Ujwala Ghodeswar, Poorvi K. Joshi, Atharva Sonkusare, Ojas Khadse, Shaikh Safee Ur Rahman</i>	
Smart Mining Helmet for Health Monitoring and Safety Assistance	1722
<i>Shaik Thasleem Bhanu, Aakash S, Bharatwajar Pssv, Don Becon M</i>	
Garbage Site Detection from Satellite Images using YOLO Model	1729
<i>Pratibha Singh, Satyam Govind Rao, Shivam Tiwari, Anil Kumar</i>	
Prompt-Driven Aspect-based Sentiment Analysis using DeBERTa with Gated Integration of Large Language Models	1737
<i>T. V. Vamsi Krishna, Morasa Yamini, Shaik Shabber Afroz, Srungarapati Chetana Nalimeedi Rohan Leo Sri Harsha</i>	
Early Fault Prediction in Industrial Equipment using MA-LSTM-CNN	1743
<i>Dinesh.T, Manogar.K, Prabu.M, Chandrasekaran.K</i>	
Omnidirectional Path Finding Algorithm using Single Ultrasonic Sensor for Robotic Cars	1748
<i>M Jyothirmai, Panathula Thanmai, Pikkili Harshitha, Mohebbanaaz, Neravati Sai Samanvitha B.Geetha Rani</i>	
Integrated Block chain Architectures for Secure Smart City E-Governance Systems	1753
<i>Akhil Chowdary Chalasani, Shashi Purna Kurapathi, Lavanya Koneti</i>	
EchoGuard: Biometric Voice-based Audio Watermarking with Blockchain-Enabled Ownership Verification	1760
<i>Padmini Devi B, Vishnu M S, Saaidarun S, Vinith M</i>	
Real Time Monitoring of Reservoir Bed Sediment using Conductivity and Multi Sensor Fusion	1765
<i>Ajith.B.Singh, Dushyanth K, Hemanth S, Jeevan Prasath D</i>	
IoT-based Secure Valve and Flow Monitoring System for Liquid Logistics	1773
<i>J Jaiganesh, Perwin Joe P, Gubera Kannan T</i>	
GNN–DQN based Joint Optimization of Pilot Allocation and Power Control in MIMO	1780
<i>Ramachandran Vijayarani, J.S. Thejeshwaane, Sandhyaa Kalaiselvan, K. Sangeetha Maamathi</i>	
An Ethical Intent-Aware Electric Fence System	1787
<i>S. Rathinamala, Banupriya V, Sivasian S, Vishal C. P</i>	
A Decentralized Blockchain Framework for Agricultural Data Tracking with Emphasis on Scalability and Farmer Adoption	1793
<i>Hamsaveni A R, D. Roja Ramani, Harshith C M, Chempavathy B, Srividhya G</i>	
An ANN-Driven Performance Optimization of Hybrid Photovoltaic–Wind Renewable Energy Systems	1799
<i>Arul Selvanayagi D, L. Kalaivani</i>	

PhotoChain: A Blockchain-based Framework for Secure and Verifiable Cross-Platform Photo Sharing	1807
<i>Nanda Kumar V, Sachin V B, Sanju Jose J, Sarathiraja M</i>	
Raspberry Pi based Assistive Reading System for Visually Impaired People	1816
<i>Mohanapriya S, Pullugari Surendra, Shubham Kumar Singh, Thammisetti Nandeeswar, Srikanth D</i>	
An Intelligent IoT-Enabled Women and Child Protection Device with GPS Tracking and SOS Alert Mechanism	1822
<i>R. Asha Mary, Devi P, Kaviya M, Rakesh V S, Ramachandran A, Rathika S</i>	
IoT-6G-Blockchain Hybrid Framework for Secure Electric Vehicle Ecosystem and Real-Time Pollution Monitoring in Smart Cities	1827
<i>Sandhya Bhardwaj, Budhavarapu Hari Kumar, Isabelo D. Paat, Lakshmi Priya G Muthurajan Subramoniam, K. Sathish</i>	
Privacy-Preserving Integrity Verification in Wireless Sensor Networks	1833
<i>V. Sree Ranganayaki, K. Johnson, K. Praveen Kumar</i>	
A Proactive AI-Driven Intrusion Detection and Prediction Framework for Secure Industrial IoT Systems	1840
<i>A. Gokul, K. Silambarasan, S. Farook, M. Meganathan</i>	
Design and Development of an IoT-Enabled Wearable Fall Detection and Health Monitoring System for Elderly People	1846
<i>D. Gopinath, J.Rakesh, T.M. Nandha Kumar, T.A. Mohana Pandi, G.Rahul, E.R.LeoNath</i>	
IoT-Enabled Smart Microclimate Control Robot for Sensitive Environments with Real-Time Sensor Monitoring	1853
<i>G Keerthana, Mahesh K, Malavika T V, N Athul, Shalitha</i>	
Analyzing Eavesdropper Influence on Performance in Hybrid Cooperative Communication Systems	1859
<i>Ali Ahmed Alqudaihi, A.P. Pushpalatha, M. Sivanandha Saraswathy, Amaleswari Rajulapati Anil Kumar Deepati, N. Dhasarathan</i>	
Learning-Assisted Radiation Pattern Optimization for Reconfigurable Antenna Arrays in Dynamic Propagation Environments	1866
<i>Ali Ahmed Alqudaihi, Amaleswari Rajulapati, V.C.Sharmila, A.P. Pushpalatha, Anil Kumar Deepati N.Dhasarathan</i>	
Edge-Federated Spatio-Temporal Deep Learning for Privacy-Aware Industrial IoT Monitoring	1872
<i>R. Senthil Kumar, N.Gayathri, Sandesh R, Suganya.P, M Rajaram, R.Banu Priya</i>	
Hierarchical RNN-based Multi-Agent Reinforcement Learning for Explainable IIoT Cyber Defense	1878
<i>A. Priya, M. Arulmozhi, S. P. Santhoshkumar, Sathya U, R.Sowmiya, G. Ganesh Kumar</i>	
Secure Edge-Fog Architecture for Social IoT and Opportunistic Network Applications	1884
<i>Nidhi Mishra, Utkarsh Anand</i>	