

2026 International Conference on Emerging Smart Computing and Informatics (ESCI 2026)

Pune, India

11-13 March 2026

Pages 1–758

IEEE Catalog Number:
ISBN:

CFP26U97-POD
979-8-3315-8950-9



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:	CFP26U97-POD
ISBN (Print-On-Demand):	979-8-3315-8950-9
ISBN (Online):	979-8-3315-8949-3
ISSN:	2996-1769

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

AI Based Lost and Found System	1
<i>K. Jaspin, Kaviya D, Jane Afra</i>	
FinBuddy AI - Personalized Financial Manager	7
<i>Mrinmayee Deshpande, Dipali Gangarde, Aniket Dhage, Pranav Sathe, Anuradha Yenikar, Pranjali Pandit</i>	
Ecomate: Your Partner in Smart Waste Management Systems	12
<i>Rupa Kawchale, Aman Ayubkhan Pathan, Aayush Barsainya, Abhaykumar Roy, Ahmed Abdullah Madhura Eknath Sanap</i>	
Empowering Travelling Doctors with AI	17
<i>Shubhangi Kamble, Shubham Bhadre, Ashwini Saindane, Shubhangi Bhagat, Hanmant Magar Soham Deshmukh</i>	
Federated Multi-Dataset Learning Framework for Smart Agricultural IoT Networks: A Simulation-Based Study	23
<i>Kochumol Abraham, T. Ramaprabha</i>	
Energy-Efficient Cluster Head Selection and Scheduling in Wireless Sensor Networks: A Comprehensive Review and Future Directions	32
<i>Jilani M. Shaikh, Preeti S. Topannvar</i>	
Improving Low-Light Underwater Object Detection Using Adaptive GAN-Driven Dual Distortion Augmentation	38
<i>Vaishnavi Navale, Prachi Vast</i>	
Solar Plant Output Estimation Using a Gaussian Signal: A Data-Driven Study	44
<i>Rohan S. Kulkarni, Neha Joshi, Smita Lonkar, Pooja Kulkarni</i>	
Smart Thermal Profiling of Photovoltaic Farms via Wireless Sensor Networks	50
<i>Rohan S. Kulkarni, Neha Joshi, Smita Lonkar, Pooja Kulkarni</i>	
An AI-Driven Iot Wearable Framework for Cancer Diagnosis and Monitoring	54
<i>Salma Naazneen, S.K.A. Ahamed Kandu Sahib, Shaik Mahammad Rasool</i>	
AgriCare: An Intelligent System for Crop Yield Forecasting and Sustainable Farming in Punjab	60
<i>Surekha Janrao, Parth Goyal, Krishna Gupta, Nilesh Mishra, Paarth Gujarathi</i>	
ESP8266 Wifi Module – Enabled Embedded System for Detection of Natural Disaster	66
<i>Gurpreet Kaur, Anurag Tiwari, Chandraditya Parmar, Deependra Kumar Chauhan</i>	
Ensemble Learning for Robust Detection and Classification of Phishing URLs	71
<i>Prayag Bhargav Thaker, Ayush Chaudhari, Krushil Vekariya, Yogesh Kumar</i>	
An Edge-AI and IoT Enabled Approach for Regular Student Mental Health Assessment at Campus Entrances for Violence Prevention	76
<i>Joe Prathap P. M., W. Vinil Dani, N. Kanya, Mini Prince</i>	
Quantum Key Distribution (QKD) Framework for Secure Military and Strategic Communication Networks	82
<i>L Sherin Beevi, Ponsy R K Sathia Bhama, Joe Prathap P. M., W. Vinil Dani, A. Sumithra</i>	

Sustainable Poultry Farming at the Edge: AI-Driven IoT Solutions for Health and Productivity Optimization	88
<i>Joe Prathap P. M., A. Brindhu Kumari, W Vinil Dani</i>	
Empirical Analysis of Classical and Quantum Models for Intrusion Detection on PCAP Data	94
<i>Agrim Naryan Pandey, Kushagra Purohit</i>	
Hybrid AI-Enabled Video Analytics for Context-Aware Safety Monitoring: An Edge-to-Cloud System for Industrial Behavioral Compliance	100
<i>Gargi Borkar, Prajakta Mhetre, Shivam Shende, Ravindra Bhalchandra Gaikwad</i>	
SkillLink: Service Oriented Approach for Services Selection	107
<i>Harshvardhan Patil, Priya Waghmare, Aditya Lad, Mahesh Divekar</i>	
AI-Driven Agro-Automation Using NDVI-Based Crop Health Analysis and IoT-Enabled Intelligent Irrigation	113
<i>Subodh Panda, G. S. Siva Kumar, Marukurthi Manishankar, Gaviramma Lekkala, Mangina Brahma Raju Garaga Raju</i>	
Exploring Machine Learning and Deep learning approaches on the Orange Dataset: An Explainable AI Perspective	117
<i>Avinash Golande, Sandhya Waghere, Amruta Hingmire, Vinodkumar Bhutnal, Kirti Deshpande Rashna Golande</i>	
Privacy-Preserving Federated Learning with Homomorphic Encryption	122
<i>Ishaan Deshpande, Shhreyash Pandey, Dr. Puneet Bakshi, Shruti Patil</i>	
Fusion Based Multi-Branch Deep Learning Framework for Real Time Audio Deepfake Detection in Financial Fraud Prevention	128
<i>Akshay N Shetye, Nilakshi Jain, Shwetambari Borade, Vineet Kumar</i>	
Bridging Face Recognition and Scene Analysis: The MOVIS Unified Architecture for Human Profiling	134
<i>Swayam Kamble, Vedant Shingade, Samiya Patel, Priya Shelke, Nakul Sharma, Chaitali Shewale</i>	
Mapping Regional Economic Development in India Using VIIRS Nighttime Lights and Machine Learning	139
<i>Hrshikesh Patil, Vishal Gupta, Aditya Bapat, A. J. Kadam</i>	
Designing a Electrochemical based Biosensor for Non-Invasive Glucose Monitoring using COMSOL	145
<i>Pattapuraju Sai Sri Lakshmi, Bonula Madhuri, Veldhi Vyshnavi, Sunkara Teena Mrudula</i>	
User Authentication through Mouse Dynamics Using Gameplay Data	150
<i>Varadraj Patil, Ayush Naik, Aryan Oswal, Vilas D. Ghonge, Vishal Nayakwadi, Yogesh Pawar</i>	
A Blockchain-Based Approach to Ensure Provenance, Integrity, and Auditability of Healthcare Data	157
<i>Priyadharshini M, Prabakeran S</i>	
Hybrid Deep Learning for Advancing Secondary Protein Structure Prediction	163
<i>Yaswanth S Praveenkumar, Jadidiah Sandeep P, Varun Aditya K, Prabakaran N</i>	
Smart Compare AI Multi-Platform Intelligent Product Recommender with Visual Insights	168
<i>Talasila Ram Kumar, Bondugula Mani Samskruthi, Dharavath Mounika, Chimmani Shreya, Baddi Jasmitha Adem Sumanjali</i>	

Integrating Facial Feature Extraction and Machine Learning for Human Sentiment Detection	174
<i>Chandrakant Deelip Kokane, Deepali V. Patil, Sonali V. Patil, Shradha V. Shilwant, Uma Patil</i> <i>Anand Daulatabad</i>	
Exploring Quantum Computing for Scalable Portfolio Optimization	180
<i>Tanvi Hirlekar, Tanvi Nehete, Vaishnavi Patil, Karnika Deore, Suvarna Chaure</i>	
Feature selection from Gene expression Microarray Alzheimer's disease (AD) Datasets using Binary Election Optimizer with Deep mRMR	187
<i>Bibhuprasad Sahu, Amrutanshu Panigrahi, Abhilash Pati, Manoranjan Dash, Janmejaya Mishra</i> <i>Chetan Aher</i>	
Multimodal Learning for ARDS: Explainable Fusion of CT and Clinical Vitals	193
<i>Rajeshwari, Madhu B. G., Roopesh Ramesh, Bangarappa L.</i>	
Sensor-Based AI Adaptive PWM Rectifier with Power Factor Optimization	199
<i>S. Sridharan, Anaandh J, Akash K</i>	
UniTR-PREVENT: Dynamic Modality Reweighting for Interpretable Prediction of Future Breast Cancer Risk	205
<i>Swati Bula Patil, Ritesh V. Patil</i>	
Deep Learning Meets Barber Optimization: Toward Smarter Wheat Disease Detection	210
<i>Bibhuprasad Sahu, Ravinder Singh Rathore, Amrutanshu Panigrahi, Abhilash Pati, Janmejaya Mishra</i> <i>Ghanashyam Sahoo</i>	
WAYSOLE – Smart Shoe For Safer Mobility Of The Visually Impaired	216
<i>S. Shanmugapriya, N. Chelli Devi, Sakthivel Sankaran, S. Charumathi, V. Karthika, B. Hemasri</i>	
FinFinder: An Intelligent Fish Identification and Freshness Assessment System Leveraging Deep Learning for Accurate Species Recognition and Freshness Evaluation	221
<i>Vikas Maral, Nagaraju Bogiri, Shilpa Katikar, Shinde Swapnil, Prashant L. Mandal, Bharat R. Devhare</i>	
Integrating Food Recognition and Allergen Awareness through Smart Mirror Technology	226
<i>D. S. Pandit, Sujata M. Patil, Shweta Anand Joshi, Snehal D. Shipne</i>	
Anticipating Cancer Onset: An Edge Optimized Transformer for Personalized, Early Breast Cancer Risk Assessment	232
<i>Swati Bula Patil, Ritesh V. Patil</i>	
AI Shredder: OCR and BERT-Driven Intelligent Document Redaction with Security Classification	238
<i>Sejal Godbole, Rohit Bhabire, Yash Gavali, Prachi Shende, Pranjal Pandit, Anuradha Yenikar</i>	
A Novel Framework for AI-Assisted Home Exercise Programs: A Hybrid Approach to Personalized and Adaptive Fitness	245
<i>Sangita Jaybhaye, Adwait Kavishwar, Shripad Borbande, Yash Agiwal, Sejal Ambekar, Archana Burujwale</i>	
Decoding Astroturfing: Measuring Its Impact and Intensity on Public Trust and Opinion in Online Discourse	250
<i>Akshata Balasaheb Badade, Rajesh Kumar Dhanaraj</i>	
AI Based Emotion Recognition and Real-Time Feedback in E-Learning Platforms	256
<i>Harsh Sarda, Poonam Dhamal, Kalyani Patil, Bhakti Karande</i>	

AI-Driven Multi-Scan Diagnostic System for Early and Accurate Detection of Multiple Sclerosis Using Deep Learning and Ensemble Models	262
<i>Vinesh Kumar, Jay Prakash Maurya, Abhishek Shrivastava, Himanshu Shrivastava</i>	
Hybrid Class Attendance Monitoring System using Bluetooth, Wifi and RFID Backup	268
<i>Praful Sambhare, Pruthviraj Pedgaonker, Neelkanth Dangra, Himanshu Dandekar, Tejas Kulkarni</i>	
Hybrid Deep–Machine Learning Framework for Soybean Seed Classification and Quality Assessment	274
<i>D. Ferlin Deva Shahila, Babitha Lincy R, P Aruna Jeyanthi, Valantina Stephen, Jefflin Shallow J. V</i>	
WatchGuard:A Real-Time Deep Learning Surveillance Framework Using YOLOv5 and Telegram Integration	280
<i>Archana Tiwari, Aditya Jaiswal, Janhvi Chandnani</i>	
Trust-Aware Generative AI Agents for Secure and Autonomous Industrial IoT Workflows	286
<i>Satya KarteeK Gudipati, Akbar Mohammed, Sambasiva Rao Akkiseti</i>	
Autonomous Seed Dispersal Rover with Sensor-Driven Site Classification Using AutoML	294
<i>Vibha Gopinath, Vijayasree Rajesh, Nidhi, Samarth Nadig, Revathi GP, Prasad B Honnavalli</i>	
Generative AI Framework for Smart Decision Support Systems in Industry 4.0	300
<i>Mohammad Nasar, Mohammad Abu Kausar</i>	
Federated Edge Learning with Multimodal Signal Fusion for Smart Agriculture and Environmental Sensing	307
<i>Satya KarteeK Gudipati, Naveen Anand Mishra, Gopikanth Ankam, Satheeshkumar Ponugoti</i>	
Hybrid-DAF-AOTL: A Three-Pathway Fusion Framework for Underwater Image Enhancement with Adaptive Tone Learning	317
<i>Vishnu Vardhan Pingali, Sargadam Likith Naidu</i>	
An Intelligent Multi-Turn Conversational Agent for Adaptive Quantum Computing Education Using Large Language Models and Quantum Circuit Simulation	323
<i>Adithya N Reddy, V S S Renesh, Achu Jayan, Bhavana V</i>	
Vehicle Analytics: An Adaptive Approach for Traffic Signal Scheduling	329
<i>Shivam Dasgude, Tanuja R. Pattanshetti</i>	
Federated Learning in Smart Healthcare with Optimized History-Based Diagnosis	335
<i>Pranav Peshkar, Shreehari Patil, Manjiri Raut, Radha Tripathi, Sagar Rajebhosale, Tushar Surwade</i>	
FinSight: A Hybrid Real-time Multi-source Framework for Stock Price Prediction	341
<i>Sumer Shinalkar, Tanuja Pattanshetti</i>	
VISION TO VOICE: A Real-time Gesture Transduction System	346
<i>G. Saravanan, K.Prem Kumar, K.Ravi Chandra Raju</i>	
A Smart Extender-Based Automatic Printing System to Digitize Traditional Print Services	352
<i>Prabhat Singh, Seema Tiwari, Yogita Hambir, Parthib Mondal</i>	
An Empirical Evaluation of Faithfulness Metrics in Explainable AI for Vision Transformers	358
<i>Shraddha Shingne, Amaan Ahmed Shaikh, Swati Khairnar, Bhakti Puranik, Varda Gotmare</i>	
VIRASAT: A Comprehensive AI-Integrated Digital Platform	363
<i>Pritesh Patil, Prathvish Shetty, Shreyas Patil, Ashirwad Swami</i>	

Machine Learning-Driven Adaptive Traffic Control System with Priority-Based Signal Optimization	369
<i>Sheela V. Chinchmalatpure, Shourya S. Desai, Vardhan M. Dhavale, Saumya S. Dhorje</i>	
<i>Ananya A. Gaikwad, Payal S. Dhaygude</i>	
Intelligent Prenatal Risk Assessment: A U-Net and HCNN-BiLSTM Approach to Nuchal Translucency Analysis	375
<i>Smita S. Pawar, Mangesh D. Nikose, Anni U. Gupta</i>	
IntelLights : An IoT and ML based Smart Traffic Lights	379
<i>Shailendra Kumar Mishra, Shreyas M Shanbhag, Aniketh Vijay Bhosale, Praveen N</i>	
FINSPIRE: A Practical, Lightweight Pipeline for Real-Time Market News Sentiment Analysis	384
<i>Sudarshan Kand, Aditi Patwa, Siddhi Waghmare, Ebad Nadaf, Abhijeet Cholke</i>	
An Efficient Replica Management: A Workflow Scheduling approach in Cloud Environment	392
<i>Aparna Wasudeo Rahane, Yugendra D Chincholkar, Wasudeo P Rahane</i>	
An Intelligent Multi-Module Workstation for Enhancing Safety and Productivity in EMS Environments	398
<i>Pragati Patil, Pravin G. Gawande, Shailesh V. Kulkarni, Rajas Patil, Aryan Wale, Sumeet Zod</i>	
Design and Development of an AI-Based Multilingual Farmer Support Application with Integrated Expert Assistance and Knowledge Hub	404
<i>Bernardo Sebastião, Niranjan Chiplunkar, Sampath Kini, Weza De Sousa</i>	
A Comparative Study of Deep Learning models for Garbage Classification	410
<i>Pradeep Kumar Bawaskar, Nikita Singhal</i>	
Multi-Modal Waste Recognition and Segregation Platform for Smart Cities	415
<i>P. Nagamani, M. Bhagya Laxmi, V. Aditya, P. Dipesh Kumar</i>	
PlaceMate- Integrated Placement Preparation Platform with AI Powered Assistance and Dynamic Test Management	419
<i>Sonali Lunawat, Rahul Wanjare, Atharv Bhagwat, Ansh Jannawar, Pratik Chavare</i>	
Smart City Navigation System for Multi-Route Recommendation and Emergency Landmark Awareness	425
<i>Sheela Chinchmalatpure, Om Ganjewar, Foram Patel, Pragati Jadhav, Manthan Gadiya</i>	
<i>Sanskar Gogawale</i>	
HashEasy: A User-Centric GUI for Cryptographic Hashing and Performance Benchmarking	431
<i>Sheela Chinchmalatpure, Palomi Sandeep Gawli, Sarvesh Gagare, Chirag Gandhi, Pragati Gupta</i>	
<i>Tejas Gandhi</i>	
Crowd Panic : A Novel Dataset and Performance Evaluation	437
<i>Madhuri Kumbhar, Anand Jain, Ankush Babar, Mansi Gaikwad, Chhaya Hedao</i>	
AI-Powered Community Cleanup and Reward Platform: Leveraging Large Language Models for Activity Tracking, Verification, and Incentivization of Neighborhood Beautification Efforts	443
<i>Praful Sambhare, Aakanksh Telrandhe, Prathmesh Patil, Parth Wadje, Gaurav Sinhalkar</i>	
Automated Lost & Found Retrieval System Using Deep learning and Geospatial Analysis	448
<i>Sheela Chinchmalatpure, Vishakha Deshmukh, Vijay Dharade, Samrudhi Deshmukh, Samruddhi Desai</i>	
<i>Aditya Gajare</i>	
X-Ray Vision: Hybrid NAS for Intelligent Fracture Detection	454
<i>Yogeshwari Mahajan, Gaurav Waje, Vishwajit Kamble, Siddarth Wakchaure, Anand Katkade</i>	

A Hybrid Architecture For Data Integrity In Centralized Forums Using On-Chain Hashing	457
<i>Vedang Subhash Utekar, Vaishali S. Kulkarni</i>	
Blockchain-Enabled Infrastructure for Dynamic Load Balancing	461
<i>Sivaprakash S, Harshvardhan Sinha, Aryan Kumar, Mannat Sinha</i>	
Climate Analyzer: Deep Learning for Vegetation Stress Detection and Short-Term Risk Forecasting	468
<i>P. Santhi, M. Sabreen Ashika, B. Monikka</i>	
A Comparative Study of YOLO Models for the Detection and Identification of Underwater Micro-Organisms	474
<i>Priyanka Vhargar, Sunita Dhavale</i>	
AI For Unspoken Feedback: A Browser-Extension Architecture for Real-Time Learner-Engagement Analytics in Massive Online Classrooms	480
<i>Chaya Jadhav, Vedant Deepak Malpure, Amey Vishnu Mahajani, Divyesh Trayambak Varade Soham Sagar Kumawat</i>	
CV-Based Water Bodies and Discharge Monitoring Using Satellite Imagery and Computer Vision	487
<i>K Kausalya, Y.Ranjith Kumar Reddy, T.Lakshmi Vyshnavi, Sendil Vadivu D, Jothiaruna N, M.Mageshwari</i>	
Robust Deep Learning Architecture for Cross-Cultural Facial Emotion Recognition in Unconstrained Environments	493
<i>Mushika Shylaja, M Sheshikala</i>	
Evolving NPCs: Leveraging AI to Create Reactive In-Game Characters	497
<i>Aravindhan S</i>	
The Aging Challenge: A Performance Evaluation on Baseline Face Recognition Models Under Cross Age Variation	502
<i>Shreiya Ramaswamy Muthuvelan, Maneesha</i>	
ECLight: Edge-Assisted Certificate-less Lightweight Encryption for Secure IoT Devices	508
<i>Sailesh S, Venkatesan C, Jeevanantham S, Rebekka B</i>	
Neuro-Symbolic Optimization for Renewable Planning	514
<i>Shubham Gade</i>	
Network Traffic Determination by Clustering with PCA	520
<i>Anant Sidhappa Kurhade, Sarita Ritesh Patil, Govindarajan Murali, Tanvi Somashekhar Hegde Vedant Harshal Jakhete, Priti Ramesh Ade</i>	
A Hybrid Deep Learning Architecture for Automatic Identification of Diabetic Foot Ulcers (DFUs) from Clinical Thermal Images	525
<i>Vytheeswar P, Devadas Bhat</i>	
Mitigating Catastrophic Forgetting Using Elastic Weight Consolidation and Hybrid Replay Frameworks	531
<i>Janhavi Manore, Sharvari Jamkar, Anjali Chavan, M. S. Wakode</i>	
Real-Time Kitchen Safety System for Fire and Accident Prevention	536
<i>Shruti A. Ramteke, Ishvari Sabankar, Gungun Ramchandani, Athrav Phalke, Priya Shelke, Vidula Meshram</i>	
Digital Twin-Enabled IoT for Real-Time Predictive Analytics in Smart Cities	541
<i>Mohammad Nasar, Mohammad Abu Kausar</i>	

Framework for a Hybrid McEliece–HQC Cryptosystem for Compact Public Keys and Efficient Decapsulation	547
<i>Mansi Barthwal, Arun Mishra</i>	
Astro Acoustic Entrainment and Multilayer Physiological Modeling for Mantra Planet Correlation Studies & Analysis using Signal Processing Framework	554
<i>Vrushali Shirpurkar, Anagha Rathkanthiwar</i>	
Systematic Analysis of Fairness-Aware Deep Reinforcement Learning for Equitable and Efficient Resource Allocation	560
<i>Suvarna Patil, Sivaneasan Bala Krishnan, Dilip Kumar Jang Bahadur Saini, Prasun Chakrabarti</i>	
Wildlife Trap Surveillance using Iot and Raspberry PI	567
<i>Rupali Shridhar Nale, Akanksha Shamrao Avhad, Priti Rajendra Bhagwat, Anamika Ankush Chaudhari</i> <i>Puja Balaji Karande</i>	
GreenFederate: A Federated Learning Framework for Energy-Efficient and Privacy-Preserving Model Training on Distributed Edge Devices	572
<i>Mohammad Abu Kausar, Mohammad Nasar, S. M. Emdad Hossain</i>	
AI Assisted Biomedical Image Annotation Tool with Manual Correction Support	580
<i>Muralidharan C, Johnsi S, Niranjana Arulnambi</i>	
Attention-Enhanced ResNet U-Net with Channel Recalibration for Robust Road Scene Semantic Segmentation	586
<i>NithyaShree AK, Sania Jesline B, Kumaran U</i>	
Development of Trend Plotter for Synchronized Thrust and Current Data Analysis of Unmanned Aerial Vehicles Propulsion System	592
<i>Sumedha Joshi, Swarada Inamdar, Dipali Ramdasi, Swati Madhe, Atul Joshi</i>	
AIDL-ZDA: An Explainable AI and Adaptive Deep Learning Framework for Zero-Day Attacks Detection in High-Speed Data	598
<i>Garima Singh, Sushma Kumari</i>	
Cloud-Native Renewable Energy Marketplace: A Comprehensive Peer-to-Peer Trading Platform Using Google Cloud Technologies	604
<i>K. Krishnanunni, Krishnapriya J. D, Malavika Ajith, Vidya Krishnan S, Divya Udayan J</i>	
Logical Neural Networks for Explainable Brain Stroke Risk Stratification	610
<i>Sai Sri Laasya Surampudi, Kotha Rupesh Sai Ram, Pallapu Moksha, Balaji T. K</i>	
TRACE: A Practical Framework for Implementing Compliance-Ready Multi-Agent AI Automation in Financial Services	616
<i>Nabanita Sinha</i>	
Reinforcement Learning for 4×4 Tic-Tac-Toe: Q-Learning with Tactical Enhancements and Epsilon Decay	622
<i>Devana Madhavan, Manas T, Zahwa K, Sai Reddy, Sripriyan K</i>	
Teaching and Learning through AI in Machine Learning Courses: A Constructivist Approach Using Technology-Assisted Collaborative Learning	628
<i>Smita Kulkarni, Dnyanda Hire</i>	

DeepAgroNet: CNN-Based Deep Learning Framework for Tomato Disease Recognition	634
<i>Priya Metri, Siddharth Gaykhe, Tejas Sinde, Soham Santosh Shinde, Krushnali Vivekkumar Kakade</i>	
Detectify: A Multimodal Deepfake Detection Framework Using Text and Image Analysis	640
<i>Isheeta Goel, Kopal Tekriwal, Tanvi Jain, Prabin S M</i>	
HealthSense AI: An Integrated IoT and AI-based Multi-Disease Prediction System	646
<i>Chaitali Shamrao Raje, Pramodkumar H. Kulkarni, Pawan Arun Gawade, Ashutosh Ranjan VishalSinh Rajpurohit, Anjali Jha</i>	
KNN-Based Anomaly Detection with Local Trust Initialization for Mitigating Blackhole Attacks	652
<i>Arya S, Harsha Varthini S, Anuradha.P</i>	
Crop Recommendation System using Optimized Machine Learning Models	658
<i>Gaurav Bora, Vaishali Ganganwar</i>	
InsightChain - AI Agent For Data Driven Supplier Discovery and Analysis	664
<i>Chris Vinod Kurian, Riya Shukla, Gaurav Prakash, Hasitha Reddy, Pooja Kamat, Rahesha Mulla Yukthesh Jalali, Swapnil Tatwawadi</i>	
AI-Driven Protocol-Level Security Measurement in IoT Applications Using S-AES Encryption and Python-Based Implementation	670
<i>Vishnu Suryawanshi, Ramesh Mali, Abhijeet Cholke, Rajesh Halke, Umabharati Yada, Rohini Patil</i>	
Comparative Analysis of DDoS Detection Performance Using Real and GAN Generated Synthetic Network Traffic Data	676
<i>Thai Tran Thanh, Tuan Trinh Ngoc, Uy Vo Van, Thuy Pham Thi Thu</i>	
Steel Surface Defect Classification Using Deep Transfer Learning with VGG16 and ResNet50	683
<i>Pavani Gunda, Sandeep Mude, Venkata Rami Reddy Chirra</i>	
CNN-Based Real-Time Traffic Density Estimation for Smart City Applications	687
<i>Shreyash Shahane, Chudaman Sakte, Amar Buchade, Manohar Kodmelwar, Srushti Shahane, Amol Patil</i>	
Deep Genomic Feature Extraction Using Multimodal Neural Networks and Alzheimer's Disease Susceptibility Prediction Role of Blood Vessels in Alzheimer's Disease	693
<i>Juraev Azizbek, Khairullaev Uchqun, Dilafruz Nurjabova, Talipova Ozoda</i>	
Evaluating the Hybrid Artificial Intelligence-Quantum Architecture (HAIQF): Performance Benchmarking Against Efficiency and Ethical-Technological Challenges	700
<i>Shrabanti Kundu, Utpal Ghosh</i>	
Ontology-Driven Automatic Question Answering System for Academic Procedures Using Vietnamese NLP Models	706
<i>Thuy Pham Thi Thu, Khanh Nguyen Gia</i>	
Dynamic Energy Management in IoT-Driven MANETs Using an Enhanced Whale Optimization Algorithm	713
<i>Lokireddy Sarala, Dingari Kalpana, Sriram Parabrahmachari, Arun M, Kothapalli Phani Varma V. Gokula Krishnan</i>	
Federated and Neuromorphic Intelligence for Privacy-Preserving 6G-IoT in Industry 5.0	719
<i>Jaynil D Panjwani, Neha Agrawal</i>	

Design and Analysis of a Compact, High-Efficiency Multiband Radiator with Enhanced Gain for Sub-6 GHz 5G and Broadband Communications	725
<i>Samta Meshram, Pranjali Jumle, Atul Deshmukh</i>	
AlexNet-LSTM-SVM Hybrid Architecture for Lung Disease Classification	730
<i>Ei Ei Khaing</i>	
CA-AI : Automated Personalized CA Assistant	735
<i>Zarina Shaikh, Sunita Patil, Saniya Rajendra Kamble, Sudhanshu Lawhare, Yashraj Ghumre</i> <i>Meet Govindwar</i>	
AI-Driven Complaint Management System : An Automated Framework for Prioritizing, Tracking, and Resolving Public Service Complaints Efficiently	741
<i>Puja Cholke, Aum Santosh Mishra, Vedant Narayan Mehar, Mayur R Chikhale, Harshal Sudhakar Marathe</i> <i>Devesh Yashawant Nhalade</i>	
Machine Learning-Based Cirrhosis Stage Prediction for Universal Health Coverage	747
<i>Diana Grace Thomas</i>	
FedChain: AI-Driven Blockchain Security with Quantum-Inspired Encryption for Federated IoT Networks	753
<i>Keziah Kerona J, Nagendrakumar D, Santhana Hari S</i>	
CrowdGuard – Smart Crowd Density Detection & Alerts System	759
<i>Varda Gotmare, Sarika Sawarkar, Hardik Bawanthade, Aditya Bhure, Gaurav Athare, Vivek Ahire</i>	
SafeShield: AI-Driven Intrusion Detection and Prevention System	765
<i>Manasi Choudhari, Girish Navale, Gunjan Ukalkar, Aeman Patel, Sonia Waghmare</i>	
TrafficIntell: AI-Driven Urban Traffic Intelligence using DeepSORT and Machine Learning	769
<i>Girish Navale, Sahil Shilimkar, Yuvaraj Poojary, Soham Rautmare</i>	
Explainable AI for Signature Forgery Verification with Automated Multilingual Report Generation	775
<i>Tanushree Arun Kadus, Sandhya Arora</i>	
Blockchain-Enabled Secure and Privacy-Preserving E-Health System EHR Sharing Framework	781
<i>Syed Rabiya Mohamed Ali, M. Venkata Ganesh, T. Srikar</i>	
Pest Sound Classifier for Crop Health Using Audio Signals	787
<i>P. Kalyanakumar, M Hathija Shana, S.P. Srimathi</i>	
A Secure and Scalable Framework for Student Recruitment Using Blockchain and AI	792
<i>Rupali Shishupal, Kush Agrawal, Chinmay Kakade, Aastha Shinde, Varad Dongarkar</i>	
A Multi-Layered Hybrid Framework for Robust Source Code Plagiarism Detection Against AI-Enhanced Obfuscation in Programming Education	796
<i>Nakul Sharma, Dhruv Lohar, Swanand More, Anish Mahalaxme</i>	
Scalable off-Chain Data Retrieval Framework for Blockchain based on Hybrid On-Chain Metadata with Automated Data Pinning	802
<i>S. Sathiya Devi, K. Jayasri</i>	
Quantum-Assisted Multi-Objective Optimization for Sustainable Energy Scheduling: Balancing Cost, Emissions, and Load Demand	808
<i>Jatin Yadav, Vaishali Ganganwar</i>	

Triple-Band Metamaterial Perfect Absorber (MPA) Using Hexagonal SRRs for Smart Environmental Monitoring Applications	814
<i>Swetha. S, Aravindh Swamy K, Gowdham S, Mohan. C</i>	
Multi-Label Thoracic Disease Detection and Classification on Chest X-Ray Images Using Hybrid Deep Learning Architecture	818
<i>Navin Kumar Agrawal, Rohit Agrawal</i>	
MPHD-FER: A Multi-Path Hybrid Deep Learning Architecture Integrating CNNs and Transformers for Highly Reliable Facial Emotion Recognition	823
<i>S. Rithika, S. Shanthi, N. Karthikeyan, P. Jaganathan</i>	
A Comparative Review of Indian Sign Language Recognition, Highlighting SVM for Static and GRU for Dynamic Gestures	830
<i>Deepak Kokani, Ajit Shiralkar, Vaishali Tidake, Balasaheb Tarle, Rupali Shevale</i>	
HCRA: Hierarchical Consonance Residual Attention Algorithm for Robust Image Tampering Localization	836
<i>Naima George, C. Anitha</i>	
Luminex Dual-Domain Contextual AlignNet for Contextual Low-Light Enhancement	842
<i>Annu Rose Jose, C. Anitha</i>	
FinNest AI: A Secure, AI-Augmented Framework for Collaborative Family Financial Orchestration and Intelligent Decision Support	848
<i>T Manikumar, Shaik Abdul Razak, Pallamala Tirumalesh, Kasetti Hima Bindu, Gutha Mounika</i>	
Abende: A DNA-Inspired Twin-Ledger System for Secure Transactions	854
<i>Joel Herve Mboussam Emati, Mounirah Djam-Doudou, Vianney Kengne Tchendji</i>	
Artificial Intelligence-Based Groundnut Crop Health Analysis and Growth Projection with Image Processing Methods	860
<i>Dharukesh M, Aravind S, C T Kavitha</i>	
Multimodal CNN Fusion for Radar-Based Human Detection Using 1D Time-Series and 2D Image Representations	865
<i>Mridul Sikder, S. M. Monowar Kayser, M D Hafiz Miah, Sahin Alam</i>	
CNN-Mamba Hybrid Model for OCT-Based Diabetic Retinopathy Classification: A Quantitative XAI Comparison	871
<i>Gouri K, Nandita Rajesh, Anjali T</i>	
Comparative Evaluation of Deep Learning Architectures for Fake News Detection	877
<i>Sowjanya Thota, Vineetha Pemmasani, Mahitha Aluri, Lakshmi Narasimha Saradhi Gundabathina Satya Krishna Nunna</i>	
Capsule-Driven Spatial Reasoning and Trigonometric Feature Encoding for Interpretable Mammographic Cancer Diagnosis	883
<i>Apurba Nandi, Biyas Ray Chaudhuri, Pratyay Ghosh, Madhurya Chowdhury, Debankita Poddar Sangita Dutta</i>	
Reconfigurable Quantum – Inspired Approximate Multiplier	889
<i>Neelima K, Devireddy Kovida, Katika Ajay Kumar, Chukka Sneha Latha, Battula Mani Chandu</i>	

From Sketch to Suspect: High-Fidelity Forensic Face Synthesis with Biometric Identity Preservation	894
<i>Pavan M, Akshay M. J., Kavana M, Mandara A, Naima, Pavithra M S</i>	
Beatless: A Deep Learning Approach for Percussive Removal in Music	900
<i>Aaroodha G P, Sarasvathi V</i>	
Non-invasive, Ayurveda-based Nadi Pariksha for Chronic Disorder Detection using an Adaptive Boundary Optimization Classifier	906
<i>Mrunal Fatangare, Sukhada Bhingarkar</i>	
Nature-Inspired Optimization Enabled Convolutional Neural Network for Threat Detection in Internet of Things	913
<i>Kapil Dnyaneshwar Dere, Pushpalata G. Aher</i>	
Night Guardian: Empowering Women's Safety with Hand Sign-based Communication and AI	919
<i>A. Annie Micheal, Challa Yaswanth Kumar, Mukkara Jithish Kumar Reddy</i>	
Glaucoma-Based Deep Learning Framework for Early Detection and Classification of Coronary Artery Disease Enhancing Early Diagnosis and Sustainable Healthcare	925
<i>Anbalagan S</i>	
Metaheuristic Optimization and Deep Learning Approaches for Resilient DDOS Detection in IoT Environments	931
<i>Shaik Sardar Zubair Ahamed, Vandana Reddy, Balamurugan M</i>	
Spatial Modulation-based 3D Index OTFS System using IMMA for 6G Communication Systems	937
<i>R. Jayashri, G. Ramkumar</i>	
Intelligent Web-Based Skin Disease Diagnosis System Using CNN Features and Medical Precaution Recommendation	943
<i>Smita Khond, Badri Shivani, Devara Thanuja, Bollempally Madhuri, Buchanpally Anjali Dheekshitha Annam</i>	
Enhancing Air Pollution Detection and Prediction Using Machine Learning Techniques	949
<i>Dinesh Komarasamy, Mohana Saranya S, Mohanapriya S, Hemanath B, Kishore S, Kishore V</i>	
EmotionNetX: A Systematic Comparative Benchmark of Modern Architectures for Facial Expression Recognition in Real-World Scenarios	955
<i>Shiva Kumar Uppara, G. V. N. S. N. Kousik, C. N. V. Tharuna Sree, Somasekhar Reddy Gayam Satya Krishna Nunna</i>	
Watchtower AI: Real-Time Detection of Abnormal Events in Surveillance Videos	961
<i>Anreddy Shanmukha Reddy, K. Sriram Charan, N. Naga Sai, N. Srivar Reddy, Supriya M</i>	
Vision-Based Detection and Material Classification of Metallic Objects Using Deep Learning	969
<i>Sania Golhar, Vivek Patil</i>	
Real-Time Indian Sign Language Recognition and Sentence Generation via CNN–LSTM and Agentic Semantic Reconstructions	975
<i>Nidharsan V, Shanthi S, Ilango M, Mugesh S, Praveen J</i>	
NeuroCLIP: Vision-Language Contrastive Learning for Medical Alzheimer’s Diseases Diagnosis from PET and Text Reports	981
<i>R Saravanakumar</i>	

A Two-Stream Feature Learning Approach for Robust In-the-Wild Emotion Classification	989
<i>Itika Dey, Shirsha Basak, Indrani Mondal, Anuska Dey, Purba Chakraborty, Sagar Dhawa, Anirban Das</i>	
The Role of Prompt Engineering in Reducing Hallucination in Generative AI Models	995
<i>M Venkata Subbarao, Sindhe Kalyani, Sindhe Shreya, Sripada Akshaya, Siddela Ambikasri Sambu Sathwika</i>	
A YOLOv11n+CBAM Framework for Small-Damage Road Inspection: Faster and More Accurate Than Prior Deep Learning Approaches	1001
<i>Vidhi Daga, Sunidhi Kini, Ananya Mohan, Anushka R Rao, Ashwini Kodipalli, Ramakrishnan Varadharajan</i>	
Comparative Framework for Parkinson's Disease Prediction Using ResNet-50 Feature Extraction with Siamese Network and SVM Classifiers on Handwritten Spiral Images	1007
<i>M. Kowsalya, S. Malliga, T. Saranya</i>	
IoT-Based Smart Helmet with Integrated Airbag, Alcohol Detection, and Real-Time Accident Response for Motorcycle Safety	1013
<i>Suresh Kagal, Swetha M S, Sindhu V R</i>	
Bark Texture Recognition for Indian Trees Using a Hybrid ConvNeXt-Transformer Architecture	1019
<i>Mohit Mishra, Alok Misra, Raj Gaurang Tiwari, Ambuj Kumar Agarwal, Harshala Shingne, Nitin Rakesh</i>	
Hybrid Federated Reinforcement Learning Approach for Clinically-Aligned Personalized Diabetes Control	1025
<i>S. P. Santhoshkumar, K. Rajeshwari, Y. Rajendra Babu, Gajalakshmi S, R. Punitha Gowri, Prince Arora</i>	
Toward Quantum-Enabled Medical Imaging: Optimized CNNs for Diagnosis	1031
<i>S. P. Santhoshkumar, S. Rajaambika, Prameen D, E. Loganathan, Bargunan S, K. Deepika</i>	
Low-Power Embedded IoT System for Smart Health and Vital Signs Tracking	1037
<i>M.Sowmiya Manoj, Aakash S, Bivinraj S</i>	
PCB Design and Development for Embedded Applications: A Practical Perspective	1043
<i>Pooja Anand, Yogesh Kumar</i>	
A Cryptographically Enhanced and AI-Assisted OTP Verification System Using Python	1049
<i>Arpana Kumar, Ayush Kumar, Riya, Neetu Sharma</i>	
Evaluating Instructor Effectiveness in Creative-Technology Education: A Machine Learning Approach with Longitudinal Data	1054
<i>S. M. Monowar Kayser, Anindya Rudra, Sayon Chakraborty, Mridul Sikder</i>	
Learning-Based α - β Guided PNCD: An Adaptive Framework for Hallucination Mitigation in Medical LLMs	1060
<i>Sudarshan Dnyaneshwar Sahane, Soma N. Ghosh, Manjari Gupta</i>	
Explainable AI for Tamil Nadu Political News: Balancing Accuracy and Interpretability in Real-Time Regional Political Sentiment Analysis	1066
<i>Nithya S, M. Thilagarani, M. Parimaladevi, Dinesh S V, Jaikamal A T, Hemachandran K</i>	
Intelligent Automation System for Multi-Format Document Processing	1071
<i>Janssen Lihansisco, Richard Wiputra</i>	

An Intelligent Artificial Intelligence Framework to Detect and Mitigate Cyber Attacks in the Contemporary Networks	1077
<i>Anubhav Sharma, Manoj Kapil, Sharvan Kumar Garg</i>	
Cloud-Based Network Packet Sniffer with Integrated Machine Learning and Firewall Security	1082
<i>Likitha R, V Laxmi Narayana, Namith K, Pacha Bharath Kumar</i>	
A Multi-Layered Legal Ontology and Public Sentiment Integration Model for Harmonizing Animal Welfare and Civic Order	1087
<i>Thilagavathi.K, Jeevika K, Parthiban.T, Asalash D. K, V.Sri Shanmuga Praba, Manicka Sundaram</i>	
A Blockchain-Enabled Legal Compliance Framework for Trademark Licensing and Franchising in the Dairy Sector	1093
<i>Thilagavathi K, C. Jayamala, Nandhini B, Ragulventhan V, B.Sasi Kumar, Induja T</i>	
Low-Cost IoT-Enabled Water Leak Detection and Prevention System Using Anomaly Detection in Sensor Networks	1099
<i>Jeeva S, Nisha J, Rajarajeswari S, Ranjana D, Kaviyarasi K, Priyadharshini M</i>	
Enhancing AI-Driven Land Boundary Mapping and City Encroachment Detection using Deep Learning and Geospatial Data	1105
<i>S.V.Balamwar, Reema Roychaudhary, Manasvi Giradkar, Gargi Gundawar, Radhika Salodkar, Gargi Udapure</i>	
SentinelAI: A Document-Aware HR Policy Question-Answering System and Automated Ticket Escalation	1111
<i>Kiran P, Latha P, Sai Sankalp S, Rutu U D</i>	
AI Prompt Injection Attack Tester	1117
<i>Likitha R, Dhanyashree D C, Lavanya H R, Preeti</i>	
ThreadWeaver: Plan-and-Restate Dialog over Ultra-Long Histories	1123
<i>Baddipadiga Praneethreddy, Sravani Ramineni</i>	
Ontology-Enhanced Waste Sorting Assistance and Online Recyclables Exchange Using On-Device Computer Vision	1129
<i>Thuy Pham Thi Thu, Truong Nguyen Hong</i>	
TS-HGN: Real-Time Ethereum Phishing Detection via Temporal-Semantic Heterogeneous Graph Networks	1136
<i>Santhi K, Aditya Hiremath, Sanjay S</i>	
SynapseCast: AI-Orchestrated Knowledge Encoding for Human Brains	1142
<i>Baddipadiga Praneethreddy</i>	
Hybrid Genetic Algorithms for Joint Energy Efficient and Stability Optimization in UAV Delivery Path Planning	1149
<i>Lyk Yin Tan, Hock Guan Goh, Soung-Yue Liew, Kok-Lim Yau</i>	
A Machine Learning Framework for Liver Cancer Classification Using Clinical Features	1155
<i>Trupti Kaushlendra Singh, Ravindra Sugdeo Sonavane, Pawan Abhaykant Tripathi, Jigisha Priyesh Panchal, Shagun Dutt Sharma, Sneha Manoj Jaiswal</i>	

A Federated Learning Framework for Secure IoT Localization in Energy Harvesting Cell-Free Massive MIMO Networks	1161
<i>Shivani Massey, Shakti Raj Chopra, Akhil Gupta</i>	
Smart Detection of Dark Patterns in Web Interfaces Using AI-Based Multi-Agent Systems	1168
<i>Aryan Samir Mejari, Savita Borole, Jagruti Save</i>	
Deep Generative Refinement and Spatial Attention Frameworks for Enhancing Early-Stage Diabetic Eye Disease Identification	1173
<i>Rehana Begum, Mohammed Ali Shaik</i>	
Human Capital Meets Artificial Intelligence: Integrating AI/ML-Powered Digital Payment Solutions into HR Ecosystems	1180
<i>Veena K P, C. Mahadeva Murthy, Pratibha Gupta, Aditi Dadhich, Vinayak Dagadu Shinde Praveen Kumar Mannepalli</i>	
Complex-Valued Deep Neural Architectures for High-Frequency Financial Signal Processing in the Spectral Domain	1187
<i>Yogesh Kumar, Sonal Borase, Ashish Khare, Prachi Beriwal, Praveen Kumar Mannepalli, Neeraj Saxena</i>	
Explainable AI with Improved RNN Optimized Fruit Fly Algorithm Based Risk Prediction Model on Adjacent Building Induced by Deep Excavation	1194
<i>Maddula Lakshmi Tejaswi, Maddula Rama Manikantha, D Leela Durga</i>	
Gym Workouts Recognition using Lightweight Multi-Sensor CNN-Attention Model	1200
<i>Sonal Abhiman Bhise, Badal Soni, Gyanda Kaushal</i>	
EVENTO: A Comprehensive Full-Stack Event Management System for Educational Institutions Using the MERN Stack	1206
<i>Sonal Ayare, Pranav Shinde, Hrishikesh Shanbhag, Gauri Sale, Avani Shinde</i>	
CMEF-Net: A Hierarchical Cross-Modality Fusion Framework for Deep Multimodal Emotion Recognition	1212
<i>M Lakshmi Narayana, B.G.Obula Reddy, T.Raghunadha Reddy</i>	
Cross-Fruit Disease Image Generation using CycleGAN: From Pomegranate to Apple	1220
<i>Amey S Khurdekar, Charulata J Patil, Vinod K Pachghare</i>	
An Optimized CNN-U-Net Framework for Kidney Segmentation in T2-Weighted MRI Scans	1227
<i>Vishalakshi M, Pramod Kumar P, Sahil Sharma</i>	
Predictive Marketing: A Campaign Text Optimization and Analysis Framework using Machine Learning, NLP and Generative AI	1232
<i>Chaitanya Thakre, Shreya Kulkarni</i>	
Dynamic Workflow Orchestration in Multiagent Systems	1238
<i>Reshma Totare, Prashant Patil, Sumit Malwadkar, Ved Mehta</i>	
A Hybrid BERT-BiLSTM-DANN Framework for Multi-Source Domain Adaptation in Sentiment Analysis	1244
<i>Mansi Borhade, Priya Chandran, Suhasini Vijaykumar, Ujwala Kawade, Anu Thomas</i>	
From Strokes to Identity: A Hybrid Deep Learning Framework for Forensic Sketch Recognition	1250
<i>Shivangi Safai, N.S. Patil, Om Salunkhe, Anjali Pokale</i>	

A Multilingual Transformer-Based Approach for Sarcasm Detection and Sentiment Analysis in Hindi-Marathi Social Media	1256
<i>Sakshi Suryawanshi, Charulata Patil, V. K. Pachgare</i>	
Multistage Transfer Learning with Deep CNN Backbones for Five-Class Diabetic Retinopathy Grading	1261
<i>Mayur K T, Andre Andrew, Udit Mukhia, Ashish Kumar, Biraj Upadhyaya</i>	
MediSync: AI-Based Medical Report Analytics and Virtual Care System	1267
<i>Rahul Borate, Deepika Ajalkar, Shruti Gupta, Sajal Jaiswal, Lavkesh Patil</i>	
Numerical Modelling of a 1D Photonic Crystal Defect-Cavity Sensor for NaCl Concentration Monitoring	1273
<i>Bibhatsu Kuiri, Parminder Singh, Dinesh Kumar, Prashant Chechi, Shivangi Verma</i>	
UPI CryptoConnect: Unifying Fiat and Crypto for Seamless Digital Payments	1277
<i>A Raghuvira Pratap, Sanjana Vellanki, Shaik Nageen Shainy</i>	
Cancelable and Revocable Cryptographic Key Generation from WASOA-Fused Multi-Modal Biometric Features	1283
<i>Manjusha Nair S, Smitha Dharan</i>	
A Multi-Layer Encryption Pipeline Enabling Encrypted Search, Order-Preserving Operations, and Secure Cloud Storage	1290
<i>Manish S R, Varshanth Reddy Y, Yuvraj R, Nalini Sampath</i>	
PrivFaceNet: Federated Deep Learning for Privacy Preserving Face Recognition	1296
<i>Anil Kumar Koona, Voruchu Sai Babu, Ashok Battula, CH Jayaprakash, Dustakar Surendra Rao</i>	
Multimodal Data Fusion and Ensemble Learning for Objective Attention-Deficit/Hyperactivity Disorder (ADHD) Assessment	1303
<i>Nic Leander A. Delgado, Ziggy Delf R. Sy, Christian V. Maderazo</i>	
A Single-View Geometric Framework for Food Volume and Mass Estimation Using Axisymmetric Modelling and Deterministic Scale Calibration	1309
<i>Aryan Shah, Utkarsh Tomar, Kumar Aprameya, J Anuradha, D Ajitha, Sourabh Tiwari</i>	
A Lightweight Transfer Learning Framework for Multi-Crop Plant Leaf Disease Classification Using EfficientNetV2	1315
<i>Tejas Anil Hirurkar, Haridas D. Gadade, Abhiraj B. Ubale</i>	
Optimizing LLM Prompt Engineering with DSPy-Based Declarative Learning	1321
<i>Shiek Ruksana, Sailesh Kiran Kurra, Thipparthi Sanjay Baradwaj</i>	
A YOLO and MiDAS-based Diet Monitoring Framework for Food Segmentation and Depth-Based Calorie Estimation	1325
<i>Advit Sonawane, Prisha Sus, Aditi Thorat, Ankit Vyavahare, Yogesh Pawar</i>	
A Real-Time Vision-Based YOLOv8 Framework for Pothole Detection and Segmentation in Intelligent Road Infrastructure	1331
<i>Shivani D. Vaidya, Amit K. Gaikwad, Piyush A. Dalke, Kaustubh R. Kapadani</i>	
A Comprehensive Deep Learning Model for Deepfake Detection Using Deep Feature Extraction and Classification	1340
<i>Kashiraya R. Biradar, Ramesh M. Kagalkar, Shivapp M. Metadar</i>	

A Hybrid Transfer Learning Framework with Attention U-Net and V-Net for Brain Tumor Segmentation and Classification	1347
<i>Gowripushpa Geddam, Jayasri Kotti, Bindu Madhuri Ch</i>	
A Frequency-Aware CNN–Vision Transformer with Adaptive Multi-Scale Feature Fusion Framework for Real-Time EEG-Based Epileptic Seizure Detection	1354
<i>Sachin Chawla, Rajeev Ranjan, Yogendra Narayan</i>	
A Hierarchical Factorized Bilinear Fusion based Dual-branch Deep Learning Model for Histopathology Image Classification	1360
<i>Pramila Soren, Jeetesh Abrol, Mahantapas Kundu, Ram Sarkar</i>	
ByteBERT: Self-Supervised Representation Learning for Malware Classification using Bytecode and Opcode Sequences	1366
<i>Anurag Pathak, Monica Dutta, Punit Kumar Sharma, Manuradha Singh, Vishnu Pratap Singh</i>	
Metaverse-Driven Digital Learning Environments for Immersive Education	1371
<i>Sunil Thakur, Yogesh Shankarrao Lonkar, Sagarkumar S. Badhiye, Vijay Nagpurkar</i> <i>Ambuj Kumar Agarwal, Pratik Mungekar</i>	
Deep Reinforcement Learning for Autonomous Robotic Manipulation Tasks	1377
<i>Vijay Kumar, Anup Hanamantrao Shinde, Smita Mate, Pradnya Borkar, Thulluri Guravaiah</i> <i>Amol Bapurao Gadewar</i>	
Personalized Learning Systems Using Machine Learning for Adaptive Education	1383
<i>Monali Gulhane, Utkarsha Aniket Gode, Trupti Chandak, Piyush Pal, Surendra Pal Singh</i> <i>Tulshihar B. Patil</i>	
Deep Reinforcement Learning for High-Frequency Trading	1389
<i>RPS Chauhan, Kalpana Rawat, Ambuj Kumar Agarwal, Manisha Sagar Pawar, Bobir Rahmatullayev</i> <i>Saatov Batirbek Sayimbetovich</i>	
Quantum-Resistant Cryptographic Protocols for Digital Currencies	1395
<i>Jyotsna Suryavanshi, Malvika Tiwari, Ambuj Kumar Agarwal, Richa Srivastava, Asila Kholmatova</i> <i>Sadullayev Almat</i>	
Blockchain-Based Smart Contracts for Cross-Border Payments	1400
<i>Nidhi Tewatia, Ambuj Kumar Agarwal, Kottala Sri Yogi, Vaibhav Chanakar, Umid Odilov</i> <i>Sattarova Dilfuza Dilshodbekovna</i>	
Hybrid CNN–Transformer Architecture for High-Precision Image Classification	1406
<i>Ramchandra Vasant Mahadik, Deepak Suresh Asudani, Swati Singh, Snehal Swapnil Jawahire</i> <i>Jyoti Nimgade, Raghunath M. Kawale</i>	
Compact Edge-AI Architecture for Real-Time Decision Making in Smart Devices	1412
<i>Mahesh Soni, Tanya Singh, Pawan Wawage, Damini Tonde, Pradnya Borkar, Jubber Salim Nadaf</i>	
Sentiment Analysis of Social Media for Stock Price Prediction	1418
<i>Dharmesh Dhabliya, Samariddin Makhmudov, Priyadarshani Singh, Amit Kumar Shrivastava</i> <i>Nargiza Masharipova, Baxtiyor Egamov</i>	
SLAM-Based Indoor Service Robot for Intelligent Human Assistance	1424
<i>Syed Sumera Ali, Shailesh Bithariya, Paul Praveen Albert Aelvakumar, Ashwini Suraj Nalawade</i> <i>Sagarkumar S. Badhiye, Supriya T. Patil</i>	

Secure Mobile Payment Systems Using Multi-Factor Authentication	1430
<i>Subhash Kumar Verma, Zokir Mamadiyarov, Devbrat Sahu, KDV Prasad, Amruta Prasad Kharade Temur Eshchanov</i>	
Cloud-Based Payment Gateways for SMEs in Developing Economies	1436
<i>Garima Sinha, Saidislom Rashidov, Kottala Sri Yogi, Pooja Goel, Khusan Jurayev, Qosimbetov Batirbay</i>	
AI-Driven Fraud Detection in Digital Wallet Transactions	1441
<i>Anamika Pandey, Om Prakash, Satyaj Tiwatri, KDV Prasad, Zafar Hakimov, Saidislom Rashidov</i>	
Cryptocurrency Volatility Prediction Using Deep Learning	1447
<i>Jyoti Gautam, Snehal Swapnil Jawahire, Neha, KDV Prasad, Khusan Jurayev, Absametova Durdana</i>	
AI-Powered Predictive Maintenance for Industrial Machinery Using Deep Learning Models	1453
<i>Jayshree Amol Gorakh, Deepak Suresh Asudani, Vidya Tushar Pokale, Mohit Aggarwal, Anjali V. Pise Rajendra Vasantryao Patil</i>	
Quantum-Inspired Optimization Algorithms for Large-Scale Machine Learning Tasks	1459
<i>Satyawan Changadev Hembade, Sagarkumar S. Badhiye, Madhuri Ninawe, Piyush Pal, Payal Sunil Lahane Amol K Kadam</i>	
Real-Time Anomaly Detection in Online Transactions	1465
<i>Shwetambari Pandurang Katake, Pooja Yadav, Anjali Chana, Samir N. Ajani, Asila Kholmatova Baxtiyor Egamov</i>	
Graph Neural Networks for Modelling Financial Market Dependencies	1471
<i>Rashmi Banchhor, Sulabha Narendra Patil, Gurpreet Kaur, Samariddin Makhmudov, Prashant Khobragade Inomjon Yusubov</i>	
Privacy-Preserving Protocols for E-Commerce Payments	1477
<i>Pooja Srishti, Nishant Tripathi, Rahul A Padgilwar, Pratima L. Patel, Sharafiddin Ismatov Inomjon Yusubov</i>	
AI-Driven Customer Support: Conversational Chatbots for E-Commerce Applications	1482
<i>Mahesh Soni, Monali Gulhane, Durga Prasad, Dipali Suresh Mate, Mrunali Kiran Gajbhiye, Anjali V. Pise</i>	
Quantum Machine Learning Models for High-Dimensional Data Analysis	1488
<i>Ambuj Kumar Agarwal, Pradnya Borkar, Sumit Chafle, Mohit Aggarwal, Pooja Dilip Morey R. Senthil Ganesh</i>	
Digital Twin-Based Real-Time Fault Prediction for Smart Manufacturing	1494
<i>Vikrant Nangare, Pradnya Borkar, Sachin Malke, Sumit Panchshil Waghmare, Suraj Bhan, P. Jagadeeswari</i>	
Vision-Based Autonomous Drone Navigation Using Deep Reinforcement Learning	1500
<i>Narendra Narole, Durga Prasad, Shubhangi Rahul Gaikwad, Sagarkumar S. Badhiye, Bhuvaneshwari Jolad Jubber Salim Nadaf</i>	
Enhanced Diagnostic Validation of the EfficientXGBoost Model for Accurate COVID-19 Pneumonia Detection	1506
<i>Bharti Sahu, Bhagwan Phulpagar, Rajesh D Bharati</i>	