Machine Learning and Autonomous Systems (ICMLAS), International Conference on

2025 International Conference on Machine Learning and Autonomous Systems (ICMLAS)
10-12 March 2025
DOI: 10.1109/ICMLAS64557.2025

Publication Year: 2025 , Page(s): 1909 - 1913
Cited by: Papers (2)

Abstract HTML

MediVault DApp: A Electronic Health Record Application Using Blockchain Technology

Lingeswara Reddy Peddu; Aditya Mishra; Amirineni Rama L Padmaja; Rekha G; Palanikumar S; R. K. Pongiannan

Publication Year: 2025 , Page(s): 1914 - 1919
Cited by: Papers (3)

Abstract HTML

The Role of IoT and Machine Learning in Automating Space Docking: Challenges, Advancements, and Future Prospects

Nayan Jikar; Yash Tale; Abhay Tale; Aditya Barhate; Prateek Verma; Aman Jikar

Publication Year: 2025 , Page(s): 1920 - 1925

Abstract HTML

IoT and the Future of Healthcare: Revolutionizing Remote Patient Monitoring

Prasad S. Ghavghave; Pratik Verma

Publication Year: 2025 , Page(s): 1926 - 1932
Cited by: Papers (1)

Abstract HTML

Sensor Based Smart Wearable Devices for Women: A Review

Chinmaya Khadse; Shital Hajare

Publication Year: 2025 , Page(s): 1933 - 1939

Abstract HTML

IoT based Line of Control Monitoring System

Taniya Petkar

Publication Year: 2025 , Page(s): 1940 - 1945

Abstract HTML

Advancing Healthcare Through Internet of Things: A Comprehensive Review of Smart Healthcare Systems and Their Applications

Rahul Raushan; Shiv Nath Chaudhri; Saurabh Suman; Dhiraj Kumar; Gulshan Kumar; Abhishek Kumar

Publication Year: 2025 , Page(s): 1946 - 1951

Abstract HTML

Smart Grid Management with AI Driven Analytics in Solar Energy

Devanshi Timande; Nishant Agade; Amit Gudadhe

Publication Year: 2025 , Page(s): 1952 - 1959
Cited by: Papers (1)

Abstract HTML

Fall Detection Using Sound with FPGA Signal Analysis and Machine Learning Integration

Mariano Viegas Andre; Ahmet Turan Özdemir; Erhan Kavuncuoglu

Publication Year: 2025 , Page(s): 12 - 18

Abstract HTML

Deep Learning-Based Floating Debris Detection for Marine Pollution Monitoring
Aswathy KP; M. Sabarimalai Manikandan
Publication Year: 2025 , Page(s): 191 - 197
Cited by: Papers (3)
Abstract HTML

Reconfigurable Smart Grid Management for Electric Vehicle Charging and the Integration of Renewable Energy Sources using Pied Kingfisher Optimizer
M. Sivaramkrishnan; M. Siva Ramkumar; Kaparthi Uday; Mohammad Kanan; C. Mohan Raj; Jayant Giri
Publication Year: 2025 , Page(s): 1960 - 1966
Abstract HTML

Electric Vehicle Charging in Smart Grids with Renewable Energy Sources Using the Secretary Bird Optimization Algorithm
M. Siva Ramkumar; M. Sivaramkrishnan; Karthikeyan G; Mohammad Kanan; Gokul Chandrasekaran; Jayant Giri
Publication Year: 2025 , Page(s): 1967 - 1973
Abstract HTML

Traffic Surveillance System Through Capsule Gated Graph Attention Network for IoT/IIoT Cyberthreat Detection and Mitigation
Mahesh Prasanna K; Devashree Marotka; Muralidharan J; Rachit Adhvaryu; Vani V; Ramya Maranan
Publication Year: 2025 , Page(s): 1974 - 1980
Abstract HTML

Red Panda Optimization Technique for Voltage Control and Electric Vehicle Reactive Power Management in Smart Micro Grids
M. Sivaramkrishnan; M.Siva Ramkumar; Kaparthi Uday; Mohammad Kanan; B. Hemananth; Jayant Giri
Publication Year: 2025 , Page(s): 1981 - 1987
Abstract HTML

Rectangular Shaped High-Performance Textile UWB Antenna
Madhavi Devi Lanka; Kovuri Sai; Jeyavardhini Battu; Boddapati Gopi Mallikharjun; Allakunta Venkateswara Rao
Publication Year: 2025 , Page(s): 1988 - 1993
Abstract HTML

Leveraging Machine Learning for Crop Disease Identification: Comparing CNN and SVM Models
Maahi Shah; Kruti Sakariya; Dipak Ramoliya
Publication Year: 2025 , Page(s): 198 - 203
Abstract HTML

Improving Cancer Classification Through an Deep Learning Framework Using Transfer Learning
Subitha D; Fayyaz Khalid; Kavitha J C; Gulisetty Abhinav
Publication Year: 2025 , Page(s): 204 - 210
Cited by: Papers (1)
Abstract HTML

Enhancing Sweet Corn Leaf Disease Detection with Machine Learning Techniques

Publication Year: 2025 , Page(s): 271 - 276
Cited by: Papers (1)

Abstract HTML

A Novel Deep Learning Framework for Intrusion Detection: Integrating Dual-Staged Attention and Squirrel Search Optimization for Enhanced Accuracy

Mahaveerakannan R; P.K. Poonguzhali; Murali Dhar M S; R Vidhya; N.V.S Natteshan

Publication Year: 2025 , Page(s): 277 - 284

Abstract HTML

An Advanced Imaging and Machine Learning Algorithm for Enhanced Oral Cancer Detection

V. Pavani; S. Triveni; G. Lakshmi Madhuri; B. Kusuma Priya; N. Bhargavi; G. Nayomi

Publication Year: 2025 , Page(s): 285 - 294
Cited by: Papers (1)

Abstract HTML

A Hybrid Learning-Based Q-Commerce Framework Evolving from E-Commerce

X. Arogya Presskila; J. Relin Francis Raj; P. Selva Kumar; G. Ram Sankar; G. Vinoth Rajkumar; P. Sundaravadivel

Publication Year: 2025 , Page(s): 295 - 302
Cited by: Papers (5)

Abstract HTML

SmartRecovery: A Deep Learning-Based System for Personalized Post-Cold Recovery Management in Diabetic Patients

G. Revathy; J. Justina Princy Thilagavathy; C Saranya; M. Thangavel

Publication Year: 2025 , Page(s): 303 - 307

Abstract HTML

A Hybrid Deep Learning Model for Optimizing Electric Vehicle Battery and Navigation Systems

R. Arul Jose; P. Ebby Darney; R. Santhana Krishnan; J. Relin Francis Raj; D. Jansi Rani; P. Sundaravadivel

Publication Year: 2025 , Page(s): 308 - 315
Cited by: Papers (3)

Abstract HTML

Comparison Analysis of Transfer Learning Models for Deep Fake Image Detection

Sujanthi S; Priya R; Ranga Shree S; Suruthika S; Sushmitha S

Publication Year: 2025 , Page(s): 316 - 322
Cited by: Papers (3)

Abstract HTML

Literature Review on Optimizing Cash Flow Forecasting Using Machine Learning in Small and Medium Enterprises

Eric Fernaldy; Santy; Kevin Deniswara

Publication Year: 2025 , Page(s): 323 - 328

Abstract HTML

Predictive Modeling of Social Media Data Using Machine Learning Techniques

T. Anitha; G. Sai Srihitha; G.R.P Lakshmi Aiswarya; K.R Raghi

Publication Year: 2025 , Page(s): 329 - 335

Abstract HTML

Skin Lesion Classification Using Feature Extraction and Ensemble Machine Learning Techniques
Arnav Sanjay Karnik; Nikhil Nair; Arham Dugar; Narendra V G
Publication Year: 2025 , Page(s): 25 - 33

Abstract HTML

Prediction of Liver Cirrhosis Disease by using XGBOOST Majority Voting Technique in Machine Learning
Ms. K. Saranya; Dr. N. Pandeeswari
Publication Year: 2025 , Page(s): 336 - 341
Cited by: Papers (3)

Abstract HTML

Potato Disease Classification Using Deep Learning
Mahesh Shendage; Kiranraje Golekar; Amit Jambhale; Arti Bang
Publication Year: 2025 , Page(s): 342 - 350

Abstract HTML

Machine Learning Approaches for Predicting Lung Cancer Risk and Early Diagnosis
Jegan K; Infant Nikesh; A. Pravin
Publication Year: 2025 , Page(s): 351 - 357

Abstract HTML

Deep Learning for Tomato Leaf Disease Detection: A Counting Sort-Enhanced Approach
G. Revathy; R Asha Mary; M.Santhosh Kumar; G. Sivakumar
Publication Year: 2025 , Page(s): 358 - 363

Abstract HTML

Optimizing Resource Costs With Machine Learning Techniques
R. Balamanigandan; R. Mahaveerakannan; S. Saraswathi; A. Mary Jenifer
Publication Year: 2025 , Page(s): 364 - 370
Cited by: Papers (2)

Abstract HTML

PredParkinson-MLP: Parkinson Disease Prediction using Multi Layer Perceptron Neural Network
Dr. Moumita Pradhan
Publication Year: 2025 , Page(s): 371 - 375

Abstract HTML

Parkinson disease is a neuro generative disorder where patient would be inactive, rigid and have shaky voice due to loss of dopamine production in the brain cell. It is useful for society to detect disease early. Some traditional methods are introduced to do that job. Recently ML algorithms are also used to do the same. Those methods are facing some difficulty like high latency and low accuracy. O... Show More

Medical Prescription Analysis Using Machine Learning
S. Jansi Rani; N. Saranya; Raghul T. M; Siva Prasanth B; Tharun K
Publication Year: 2025 , Page(s): 376 - 379

Abstract HTML

Enhanced Quality of Learning (QOL) via Secured Recommendation and Sentimental Analysis in Online Classes
T. Saravanan; S. Saravanakumar; V Ganesh Karthikeyan
Publication Year: 2025 , Page(s): 380 - 384
Abstract HTML

Deep Learning Technique for Image-Based Bladder Cancer Diagnosis: A Comprehensive Review
R Reena; S Amala Shanthi
Publication Year: 2025 , Page(s): 385 - 388
Abstract HTML

Design and Analysis of Smart Health Care Predictions Using Machine Learning
Ashok kumar. V; G.Soniya Priyatharsini; Krishna Bhimaavarapu; R.M.Dilip Charaan; Jai Prakash Konakalla; E Chandralekha
Publication Year: 2025 , Page(s): 389 - 395
Cited by: Papers (1)
Abstract HTML

Reinforcement Learning-Driven Adaptive Signal Processing for Low-Power Edge Devices in Dynamic Environments
Raj Kashikar
Publication Year: 2025 , Page(s): 34 - 39
Cited by: Papers (1)
Abstract HTML

A Comprehensive Review on Deep Learning Based Fall Detection in Elderly People
S. Venkata Suryanarayana; Lakshmi H.N; Posimsetti T Chiranjeevi Swamy; D. Bhanu Mahesh
Publication Year: 2025 , Page(s): 396 - 402
Cited by: Papers (1)
Abstract HTML

GuavaCareNet: Empowering Guava Farms with Federated Learning for Real-Time Disease Diagnosis
M. Saravana Karthikeyan; D. Kirubha; R. Santhana Krishnan; J. Relin Francis Raj; N. Soundiraraj; S. Murali
Publication Year: 2025 , Page(s): 403 - 410
Cited by: Papers (4)
Abstract HTML

An Ensemble Machine Learning Model for Osteoporosis Risk Prediction from Medical Data
Thulasi. M; G. Thailambal
Publication Year: 2025 , Page(s): 411 - 415
Cited by: Papers (1)
Abstract HTML

Intelligent Crop Yield Modeling Using Attention Networks and Dynamic Ensemble Learning
Omprakash Mandge; Suhasini Vijaykumar
Publication Year: 2025 , Page(s): 416 - 423
Cited by: Papers (1)
Abstract HTML

Artificial Intelligence and Machine Learning for Accessibility: Smart Reader as an Assistive Tool for the Visually Impaired

Optimized Machine Learning Framework for Liver Disease Prediction Using Ensemble Learning and Feature Selection
Rekha G; Madaka Hima Teja; Sneha Priyadarshani; K.Satish Babu; Brindha R; Pongiannan R K
Publication Year: 2025 , Page(s): 476 - 481
Abstract HTML

Machine Learning in Healthcare: A Review of Current Applications and Future Trends
Prajyot Yesankar; Chetan Puri; Aditya Barahate; Pradanywant M. Gote; Janhavi Hajbe; Adesh Pawar
Publication Year: 2025 , Page(s): 482 - 487
Cited by: Papers (1)
Abstract HTML

Machine Learning in Healthcare: A Review of Applications, Opportunities and Challenges
Trupti Thute; Saniya Saratkar; Aarti Chaudhari; Rohini Raut; Gayatri Thakare
Publication Year: 2025 , Page(s): 488 - 495
Abstract HTML

Role of Machine Learning in Climate Change Prediction and Mitigation
Nayan Jikar; Yash Tale; Abhay Tale; Aditya Barhate; Prateek Verma; Aman Jikar
Publication Year: 2025 , Page(s): 496 - 501
Cited by: Papers (2)
Abstract HTML

Improving Software Defects Detection: An In-Depth Analysis of Machine Learning Methods and Static Analysis Tools for Greater Accuracy
Veer Bobade; Chetan Puri
Publication Year: 2025 , Page(s): 502 - 507
Cited by: Papers (2)
Abstract HTML

Artificial Intelligence and Machine Learning in Telemedicine: Transforming Remote Healthcare
Shrikant Khadse; Prateek Verma; Vivek Lande
Publication Year: 2025 , Page(s): 508 - 514
Abstract HTML

Deep Learning Utility for Gas/Odor Sensor Signature Analysis
Yashasvi Raut; Shiv Nath Chaudhri
Publication Year: 2025 , Page(s): 515 - 519
Cited by: Papers (1)
Abstract HTML

Deep Learning Approach and its Application in the Cybersecurity Domain
Pawan Dilip Chaudhari; Amit Gudadhe
Publication Year: 2025 , Page(s): 520 - 524
Cited by: Papers (1)
Abstract HTML

A Review of Machine Learning Techniques for Predictive Crop Yield Modeling

Shrikant Khadse; Prateek Verma; Athrava Milmile
Publication Year: 2025 , Page(s): 525 - 530

Abstract HTML

Crop Yield Prediction with Suitable Fertilization Using Deep Learning
R. Tamilkodi; N. Madhuri; G. Geetha Durga Bhavani; K. Manoj Yadav; Pp Sayandh
Publication Year: 2025 , Page(s): 47 - 52
Cited by: Papers (4)

Abstract HTML

Enhancing Battery Durability: Early Life Cycle Prediction Through Machine Learning
Dasari Naga Vinod; N Kapileswar; Judy Simon; Aarthi Elaveini M; Phani Kumar Polasi
Publication Year: 2025 , Page(s): 531 - 536
Cited by: Papers (1)

Abstract HTML

Validation of Generative Visual Solutions Using Prompt Engineering and Caption Based Visual Reasoning Models
Manali Arora; Chirag Garg; Deepanshu Mangla
Publication Year: 2025 , Page(s): 537 - 543

Abstract HTML

Artificial Intelligence in Health Care Computing and Assessments in Oman: an Effectual Study
Wilfred Blessing N. R; Hemalatha Gunasekaran; Hariharan B.; Jaber Saleh Salim Al Jabri; Kavitha S. J; Sutherlin Subitha G.
Publication Year: 2025 , Page(s): 544 - 549
Cited by: Papers (1)

Abstract HTML

Cyberbullying Detection Using QDA and LDA Algorithms
T.Sitanshu Sai; Rohit Singavarapu; Adithya Penala; Boya Rakesh; Anjali T
Publication Year: 2025 , Page(s): 550 - 557

Abstract HTML

PCOS Diagnosis Through Time-Series Analysis Using RNN with Attention Mechanism
Jastinder Kaur; Raj Sinha
Publication Year: 2025 , Page(s): 558 - 564
Cited by: Papers (1)

Abstract HTML

ScaNana: Unlocking Potential Products from Scanned Banana Varieties Using Image Recognition
Diana Hannah F. Gonia; Marjore I. Jamodiong; Haidee M. Yadao; Lord Ian M. Paquiao; Jamel D. Pandiin; Daryll A. Cabagay
Publication Year: 2025 , Page(s): 565 - 571

Abstract HTML

Crypto Trading Platform: MERN Stack with Real-Time Data and Social Features
Gurupriya M; Mouhitha A; Saranya Gujjula; Okesh Reddy Ankireddypalli
Publication Year: 2025 , Page(s): 572 - 580

Abstract HTML

Advancing Cardiovascular Disease Prediction Using LLMs
Tazveen Zanab; Bhavani K; Shunmugapriya B; Shenbagaraman A; Kanthimathi M
Publication Year: 2025 , Page(s): 581 - 588
Abstract HTML

Retrieval Augmented Generation for Relational Mapping of Resume Data for Improved Analysis
Vazzula Manish; Yugandhar Manchala; Sudeep Banerjee Chopra; Muddam Siddartha; Kothi Yashwanth Reddy
Publication Year: 2025 , Page(s): 589 - 594
Cited by: Papers (1)
Abstract HTML

MRI Brain Tumor Classification Using Optimized APSO-LLRBFNN
Tiruveedula Gopi Krishna; Nune Sreenivas; M. Ajay Kumar; Chandra Sekhar Reddy; Davinder Sing Rathee; Teklu Urgessa
Publication Year: 2025 , Page(s): 595 - 601
Abstract HTML

Smart Air and Water Quality Monitoring for Industrial Emissions using IoT and Machine Learning
Ms. R. Ramya; Mr. S. Amithesh Sharavan; Ms. S. Asfiya Taj; Mr. D. Kaviyarasan
Publication Year: 2025 , Page(s): 53 - 60
Abstract HTML

A Systematic Review on Monkeypox Skin Disease Identification Approaches
Prexa Desai; Amit Barve; Kishori Shkokar
Publication Year: 2025 , Page(s): 602 - 607
Abstract HTML

Advanced Vision-Language Pipelines: Contextual Learning and Interactive Segmentation for Medical Imaging
Sachin M Sabariram; Sanjay Vikram C B; Sharon Deborah E; Kavin M; Saravanan G
Publication Year: 2025 , Page(s): 608 - 615
Abstract HTML

Privacy-Preserving Real-Time Action Recognition on Mobile Devices Using Edge Computing and CNNs
M.S. Minu; K. Selvi; Dhanasakkaravarthi; Mohanaprakash T A; Darshan R; Abhijith Dasan; Ashvyn Kumar K
Publication Year: 2025 , Page(s): 616 - 625
Cited by: Papers (1)
Abstract HTML

VirtualMe: A Large Language Model-Powered Chatbot for Enhanced Human Computer Interaction
Srujana Inturi; Swarna Latha Potluri; Guda Vanitha; B Indira
Publication Year: 2025 , Page(s): 626 - 634
Abstract HTML

An Improved Design of ResNet for Plant Diseases Detection
Suneetha Madduluri; K R Anudeep Laxmikanth; K. Sunil Kumar;

Manoj Kumar Myakala; Angothu Govinda
Publication Year: 2025 , Page(s): 635 - 641

Abstract HTML

Artificial Neural Networks for Enhancing Soccer Team Performance Through Tactical Data Analysis
Chitra Sabapathy Ranganathan; Pramod Pandey; M. Arulprakash; Kanapathy Gopalakrishnan; T. R. GaneshBabu; S. Murugan
Publication Year: 2025 , Page(s): 642 - 647
Cited by: Papers (3)

Abstract HTML

< 1 2 3 4 >

PredParkinson-MLP: Parkinson Disease Prediction using Multi Layer Perceptron Neural Network

Publisher: IEEE

Cite This PDF

Dr. Moumita Pradhan All Authors

Abstract:
Parkinson disease is a neuro generative disorder where patient would be inactive, rigid and have shaky voice due to loss of dopamine production in the brain cell. It is useful for society to detect disease early. Some traditional methods are introduced to do that job. Recently ML algorithms are also used to do the same. Those methods are facing some difficulty like high latency and low accuracy. Our focus is to overcome these problems. We have introduced PredParkinson-MLP to predict parkinson disease along with time estimation. Our dataset consists of 31 people, with 23 positive parkinson disease cases. Performance of our model is compared with other ML algorithms like Decision tree, XGBoost, and SVM. Various performance measurement metrices (Accuracy, Precision, Recall, and f1 score) are used to prove enhancement of our model. According to the outcome, our suggested technique beats other existing techniques in terms of accuracy (97.43 %) and precision (96.96 %).

Published in: 2025 International Conference on Machine Learning and Autonomous Systems (ICMLAS)

Date of Conference: 10-12 March 2025

DOI: 10.1109/ICMLAS64557.2025.10968652

Date Added to IEEE *Xplore*: 25 April 2025

Publisher: IEEE

ISBN Information:
Electronic ISBN:979-8-3315-0574-5
DVD ISBN:979-8-3315-0573-8
Print on Demand(PoD) ISBN:979-8-3315-0575-2

Conference Location: Prawet, Thailand

I. Introduction

In this modern era, human are trying to incorporate machine mostly computer for all aspects of their life. They want to make easy all types of jobs using artificial intelligence specially machine intelligence. As improvement comes in their life much more problems are also generated. In present scenario patients of PD faces various difficulty to live their life [1]. They may face: 1.

body balance issue named postural instability,

2.
slow movement called bradykinesia,

3.
stiffness of arms, necks, or legs etc.

4.
listening problem.

5.
no proper food intake [2].

6.
rigidity or stiffness of the arms, legs, or neck.

7.
balance issues.

Authors

Dr. Moumita Pradhan
Information Technology, BCREC, Durgapur, West Bengal, India

Figures

References

Keywords

Metrics

Back to Results