# 2024 International Conference on Advances in Data Engineering and Intelligent Computing Systems (ADICS 2024)

Chennai, India 18-19 April 2024

Pages 1-594



**IEEE Catalog Number: ISBN:** 

CFP24US0-POD 979-8-3503-6483-5

## Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP24US0-POD

 ISBN (Print-On-Demand):
 979-8-3503-6483-5

 ISBN (Online):
 979-8-3503-6482-8

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

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com







### 2024 International Conference on Advances in Data Engineering and Intelligent Computing Systems (ADICS)

#### **Table of Content**

Paper Id	Paper Title	Page Number
581	Breast Cancer Detection Using Neural Networks	1-4
691	Electric Vehicle Battery Health Monitoring System	5-10
207	Early Detection Of Cardiovascular Disorders Using Enhanced Ann Model	11-16
648	Healthbot Analytics: Optimizing Healthcare Efficiency Through Intelligent Integration	17-23
649	Phytosense: Cultivating Trust Origins With Ai	24-29
295	Driver Drowsiness Detection Using Mobilenetv2 With Transfer Learning Approach	30-35
256	Identification Of Uterine Cervical Cancer Using Cnn Compared To Anfis Approach On Mri Images	36-41
425	Violence Detection Through Surveillance Videos Using Combination Of Vgg16  And Lstm	42-46
762	Unforgettable Password Generation Using Lora Fine-Tuned Large Language Model	47 - 51
492	Olfv: Harnessing The Power Of Enhanced Deep Learning Model To Recognize Fingerprints Using Optimization And Classification Principles	52 – 58
626	Large Language Model Based Document Query Solution Using Vector Databases	59 – 63
569	Enhancing Accessibility For Visually Impaired Users: A Blip2-Powered Image Description System In Tamil	64 - 69
149	Microplastic Identification In Seawater Using Generative Adversarial Networks	70 - 75
35	Real-Time Gesture Based Sign Language Recognition System	76 - 81
640	Mind Over Matter: Investigating The Interplay Of Blood Glucose And Brain Metabolism	82 - 87
229	Document-Based Text Summarization Using T5 Small And Gtts	88 - 93

610	Analyzing Eeg Patterns As Predictors Of Physiological Responses	94 - 99
467	Analysis On Success Factors For Improved User Search Through Comprehensive Locality Information	100 - 105
651	Personalized Mental Health Analysis Using Artificial Intelligence Approach	106 - 111
683	Enhancing Cyberbullying Detection: A Multi-Algorithmic Approach	112 - 116
266	Using A Hybrid System Of Coactive Adaptive Neuro-Fuzzy Inference Based On Glcm For Prostate Cancer Categorization	117 - 123
506	Web Application For Identifying Emerging Trends And Technologies Using Scopus And Openai Apis	124 - 127
596	Navigating The Infotainment Landscape: Status And Regulations In The Digital Age	128 - 133
571	Echo Guidance- Voice-Activated Application For Blind With Smart Assistive Stick Using Machine Learning And Iot	134 - 139
585	Effective Automatic Cyberbullying Detection Using A Hybrid Approach Svm And Nlp	140 - 145
722	Guardian Box Through Honeypot Using Shielded Socket For Linux Distribution	146 - 153
151	Unveiling The Vision A Comprehensive Review Of Computer Vision In Ai And Ml	154 - 159
565	Revolutionizing Blood Donor Management Using Cloud Computing	160 - 165
17	Revolutionizing Dental Caries Detection: An In-Depth Study Of Neural Network Approaches	166 - 171
739	Public Space Real-Time Violence Detection And Notifier	172 - 176
543	Ai-Enhanced Image Translation For Seamless Communication In Global Tourism	177 - 181
748	A Meta-Learning Framework With Model Stacking For Depression Detection Through Sentiment Classification	182 - 189
152	Impact Of Pca On Lung Cancer Dataset Classification: A Comparative Analysis Of Machine Learning Models	190 – 194
721	Smart Elevator System With Intelligent Floor Level Prioritization Using Object Detection	195 – 200
646	Classification Of Bacteria From Agar Plate Using Deep Learning And Image Processing	201 - 206
145	Detection Of Distracted Driver Using Deep Learning Algorithm	207 – 212
572	Yolov8 A Novel Object Detection Algorithm With Enhanced Performance And Robustness	213 – 218

337	Pulsesync Bp: A Neural Network Framework For Non-Contact Blood Pressure Estimation	219 – 225
550	Enhancing Dermatological Diagnosis With Optimized Deep Learning Lenet Model	226 – 231
426	Integrating Ai And Iot For Enhanced Predictive Healthcare Monitoring: A Comprehensive Study On Breast Cancer Patient-Centric Approach	232 – 236
469	Ddos And Botnet Attacks: A Survey Of Detection And Prevention Techniques	237 - 223
624	Walmart Sales Forecasting Using Time Series Analysis	244 – 248
137	Enhancement Of Industrial Automation Using Iot	249 – 254
462	Tri-Unitynet: A Multifaceted Ensemble Model For Pneumonia Detection	255 – 260
46	An Intelligent Invoice Processing System Using Tesseract Ocr	261 – 266
5	Birds Species Identification Using Deep Learning Model	267 – 273
329	Ai Enhanced Video Sequence Description Generator	274 – 279
660	An Efficient Method To Predict Student Education Performance Using Googlenet Compared With Inceptionnet	280 – 285
431	A Novel Approach On Automatic Maritime Object Detection And Classification Using Support Vector Machine In Comparison With Residual Networks	286 – 290
663	Improving Quantum Computer's Error Rate Using Quantity Computational Algorithm Comparing With Shor's Algorithm	291 – 295
465	Revolutionizing Malaria Diagnosis Precision Segmentation Of Thin Blood Smears Via Advanced U-Net Convolutional Architectures	296 – 301
666	Prediction Of Indian Gdp Using Xgboost Compared With Adaboost	302 - 305
709	Effective Anatomy Learning Using Markerless Augmented Reality Interface For Medical Education	306 – 311
670	Generative Facial Prior Generative Adversarial Networks Based Restoration Of Degraded Facial Images In Comparison Of Psnr With Photo Upsampling Via Latent Space Exploration	312 - 316
672	Enhanced Accuracy And Prediction Of Novel Random Forest Algorithm  Compared Over K-Nearest Neighbor In Software Bug Prediction System	317 – 322
601	Early Breast Cancer Prediction Using Machine Learning Algorithms	323 – 329
206	Quantum Computing Odyssey: Teleporting To The Realm Of Unparalleled Possibilities	330 – 335
600	A Novel Proxy Re-Encryption Technique For Secure Data Sharing In Cloud Environment	336 – 340

710	Classification Of Parkinson's Disease Based On Acoustic Characteristics Using Feature Selection	341 – 346
650	Autism Spectrum Disorder Prediction Using Machine Learning	347 – 352
20	A Novel Text Recognition Using Deep Learning Technique	353 – 358
482	Emotional Evaluation Of Facial Tension Using Lstm For Psychological Assessments	359 – 365
389	Utilizing Web Scraping And Machine Learning For Improving Accuracy Of	366 - 370
	Smartphone Price Prediction	
697	Advanced Iot Routing Algorithms For Improved Food Delivery Services With	371 – 376
	Temperature Control	
141	Mango Leaf Disease Detection And Classification Using Spatial Attention	377 - 383
	Enabled Ensemble Classification	
704	Iot-Driven Energy Savings In Warehouses Cloud-Integrated Lighting	384 – 389
	Management	
694	Iot-Enabled Personalized Icu Nutrition Plans: An Intelligent Approach Through	390 – 395
	Decision Tree Algorithm	
558	Greensense Iot-Enabled Smart Monitoring And Early Detection System For	396 – 401
	Optimal Plant Health In Greenhouse	
407	Ambulance Optimal Routine Path Detection Using Folium And Polygonal Path	402 - 406
	Finding	
556	Envirotech: Revolutionizing Waste Management With Iot-Driven Automated	407 – 411
	Segregation And Alerts	
757	Secure Remote Access To Local Network With Distributed Tunnel Management	412 – 417
527	Navigating Player Performance Clusters For Sports Excellence	418 – 423
218	Classification Of Brain Tumor Using Generative Adversarial Network With Res	424 - 430
	Net Discriminator	
564	Silent Alert: Advancing Women's Security Through Smart Sign Recognition And	431 – 436
	Ai	
422	Enhancing Text Quality With Bi-Lstm: An Approach For Automated Spelling	437 – 443
	And Grammar Correction	
693	An Integrated Secure Rail System For Accident Prevention And Anti-Hijacking	444 – 451
	Measures	
623	Llm-Enhanced Deepfake Detection: Dense Cnn And Multi-Modal Fusion	452 – 457
	Framework For Precise Multimedia Authentication	

221	C C	450 462
221	Smart Surveillance: Real-Time Object Detection And Recognition With	458 – 463
	Interactive Polygon Region Using Deep Learning	
612	Enhanced Visual Question Answering System Using Densenet	464 – 469
676	Lung Cancer Classification Using Ct Scan Images Through Deep Learning And	470 - 474
	Cnn Based Model	
587	Soil-Based Crop Recommendation System Using Machine Learning	475 – 480
621	Smart Traffic Management For Congestion Control And Emergency Vehicle	481 – 486
	Priority	
604	Early Detection And Prediction Of Sleep Apnoea Using Deep Learning	487 – 492
	Techniques	
532	F-Sift: Fuzzy Based Smart Intelligence Farming Techniques Using Iot Technique	493 – 498
652	A Comparative Study On Reinforcement Learning In Disease Prediction On	499 – 505
	Medical Data	
625	Nlp-Based Microblogging Post Filtering For Disaster-Related Content	506 – 510
19	Machine Learning Driven Cardiovascular Disease Prediction Among Male Senior	511 – 516
	Adults	
140	Tomato Leaf Diseases Prediction Using Deep Learning Algorithms	517 – 521
753	Automated Brain Tumor Detection And Classification Through Deep Learning	522 - 526
	Analysis Of Mri Scans	
461	Prediction Of Most Confident Labelled Output For Fashion Image Using Deep	527 – 532
	Learning Model With Tensorflow	
43	Improved Traffic Sign Detection In Autonomous Driving Using A Simulation-	533 – 538
	Based Deep Learning Approach Under Adverse Conditions	
517	Exploring And Analysing Deep Reinforcement Learning Based Algorithms For	539 – 543
	Object Detection And Autonomous Navigation	
605	Multi-Task Learning For Tomato Crop Disease Detection And Severity	544 – 551
	Estimation Using Cnn Framework	
367	A Review On Deeplungnet: Cnn-Based Lung Cancer Detection Techniques Using	552 – 557
	Ct Images	
730	Forecasting Of Crime Hotspots And Analysis Using Machine Learning	558 – 562
381	Performance Evaluation Of Machine Learning Algorithms On The Intrusion	563 – 567
	Detection System Of Military Defence Operations	
533	Deepfake Detection By Prediction Of Mismatch Between Audio And Video Lip	568 – 575
	Movement.	
641	Similarities And Ranking Of Documents Using Tf-Idf, Lda And Wam	576 - 581

681	Conceptual Level Semantic Sentiment Analysis Using Twitter Data	582 - 589
243	Optimizing Security Posture Via Synergized Fingerprint And Facial Recognition In Integrated Authentication Framework	590 – 594
578	Vision Based Landing Pad Detection For Autonomous Landing Of Quadcopter	595 – 600
147	Iot-Enabled Ro Wastewater Management For Sustainable Development	601 - 606
731	An Ensemble Framework For Network Anomaly Detection Using Isolation Forest And Autoencoders	607 – 612
21	Mri Brain Tumor Segmentation And Classification Using Different Deep Learning Models	613 – 618
406	Unmasking Frame Duplication: Comprehensive Approach To Detection In Digital Video Using Machine Learning Algorithms And Signal Processing Techniques	619 – 624
636	Public Human Assault Prediction Using Human Activity Recognition With Ai	625 – 629
159	Automatic Segmentation And Machine Learning Classification Using Optical Coherence Tomography And Angiography	630 – 635
579	Image Despeckling For Synthetic Aperture Radar Using Reinforcement Learning	636 – 640
643 / 539	Bone Age Classification Using Cnn Algorithm	641 – 646
717	Designing A Blockchain-Enabled Organ Donation Model For Enhanced Transparency And Trust	647 – 651
620	A Novel Approach To Optimize Energy Consumption In Industries Using Iiot And Machine Learning	652 – 657
237	Pressure, Queue, And Average Speed - Based Multi-Agent Dqn For Optimizing Traffic Signal Control	658 – 663
2	Intelligent Transportation Systems: Exploring Digital Twin Technologies In Smart Grid, Transportation Systems And Smart Cities	664 – 670
219	A Human Activity Determination Predicting Abnormality For Mining Field Workers	671 – 675
741	Pedestrian Detection For Visually Disabled Using Computer Vision	676 – 681
261	Skin Disease Classification Using Transfer Learning With A Modified Resnet-50 Architecture	682 – 687
548	Tech-Infused Agri Revolution: A Holistic Approach To Sustainable Agriculture And Food Security In India	688 – 693
639	Computer Aided Diagnosis System For Prediction Of Gleason Score In Prostate Cancer	694 – 700

549	Vibe: A Data-Driven Approach To Career Guidance And Skill Development	701 - 706
584	Fitness Guide: A Holistic Approach For Personalized Health And Wellness	707 – 711
	Recommendation System	
608	Deoxyribonucleic Acid Based Oryza Sativa Phenotype Prediction Using	712 – 717
	Molecular Neural Network	
557	Leveraging Explainable Ai For Improved Understanding And Prediction Of Drug	718 - 721
	Responses In Igf1r Signaling Pathways	
698	Iot-Enabled Water Pollution Detection For Real-Time Monitoring And Pollution	722 - 728
	Source Identification With Mqtt Protocol	
702	Iot-Enabled Aquaponics And Hydroponics For Efficient Indoor Farming Systems	729 – 733
	With Cloud Computing	
701	Iot-Enabled Smart Military Training For Virtual Simulation And Real-Time	734 – 739
<b>=</b> 00	Performance Analysis	540 545
700	Real-Time Monitoring System For Safe Drinking Water Safety Using Iot And	740 – 745
702	Cloud Computing	746 751
703	Iot-Enabled Black Box For Driver Behavior Analysis Using Cloud Computing	746 – 751
470	Vulnerability Testing On Iot Networks Using Machine Learning Algorithm	752 – 756
707	Random Forest Predictive Model For Ventilator-Associated Pneumonia Prediction	757 – 762
	With Iot Data Analytics	
705	Cloud-Enabled Fingerprint Attendance Management System Using Convolutional	763 - 768
	Neural Networks In Educational Institutions	
708	A Distributed Data Mining And Cloud Analysis For Predictive Gas Level,	769 – 774
10.6	Dynamic Booking, And Smart Energy Optimization	
486	Empowering Iot Security By Classifying Threat Detection Through Machine	775 – 779
450	Learning	<b>5</b> 00 <b>5</b> 05
473	Minimizing Congestion In Ring Topology Using Node-To-Node Path-Finding	780 – 785
<i>5</i> 10	A Naval Taut To Speech Conversion Using Historychical Navad Naturals	797 700
519	A Noval Text To Speech Conversion Using Hierarchical Neural Network	786 – 790
249	Coa -Based On Stable Clustering Algorithm For Vanet Using Matlab	791 – 796
258	Mkce Navigate Me: Seamless Campus Navigation	797 – 801
713	Optimal Weight-Tuning For Unbalanced Data In Credit Card Fraud Detection	802 - 807
524	Distributed Denial Of Service (Ddos) Attack Detection Using Classification	808 - 813
	Algorithm	
555	A Robust Road Lane Detection Using Computer Vision Approach For	814 – 819
	Autonomous Vehicles	

452	Real-Time Speed Estimation On Indian Vehicles Using Deep Learning And	820 – 826
	Computer Vision	
288	Employing A Machine Learning-Based Approach For Enhanced Big Data	827 - 832
	Analysis In Supply Chain Management	
567	Anisotropic Diffusion Method On Multiple Domain Noisy Images: A	833 - 837
	Recommendation	
228	Tuning Of Optical Ring Resonators Based Obfns By Optimization Algorithms	838 - 841
576	Deep Learning-Based Detection Of Fungal Diseases In Apple Plants Using	842 - 847
	Yolov8 Algorithm	
570	Enhanced Gradient Boosting Technique To Detect The Malware In Api	848 - 853
655	Real Time Monitoring And Configuration Interface For Smart Home Device	854 – 860
	Management Using Streamlit And Pygame	
638	A Real-Time Vehicle Detection And Speed Estimation Using Yolo V8	861 – 866
313	Analysing The Role Of Human-Ai Collaboration In Workforce Transformation	867 - 873
16	Secured Blockchain Technology For Medical Supply Chain (Sb-Msc)	874 – 879
255	An Integrated Development Of Iot Based Machine Learning For Data-Driven	880 – 886
	Travel Recommendations	
416	Adaptive Residual Attention Network For Handwritten Character And Digits	887 – 892
	Recognition With Improved Energy Valley Optimizer Algorithm	
434	Secure - Medshare : Decentralized Patient Data Sharing For Improved Healthcare	893 – 898
577	A Framework For Quantum Based Software Development Process	899 – 904
563	Predictive Risk And Complexity Score Assessment Model For Cloud Computing	905 – 910
484	Rx Assist - Smart Disease Prediction And Drug Recommendation	911 – 916
559	A Novel Approach To Forecasting Crude Oil Price Based On Lstm And Online	917 – 922
	Learning	
759	Tamilcognibert: Enhancing Tamil Language Comprehension Using Self Learning	923 – 929
696	A Study On Design, Development And Deployment Of Web Crawler Algorithms	930 – 935
	And Their Metrics	
491	Ml Based Remote Sensing Mobile And Web Solution For Crop Area Estimation	936 – 940
	By Farmers And Field Staff	
26	Ai-Optimized Irrigation For Sustainable Agriculture	941 – 949
613	Fine – Grained Forgery Localization In Images Using Cnn - Svm Approach	950 – 954
489	Predicting Recurrence In Differentiated Thyroid Cancer: A Machine Learning	955 – 960
	Approach	

736	Deep Learning Based Crop Yield Prediction And Disease Identification	961 – 965
616	Bloggen- A Blog Generation Application Using Llama-2	966 – 971
471	Analysis Of Cybersecurity Awareness Among Young Generation: A Research Exploration	972 – 976
525	Twitter Scraping And Sentiment Analysis On Stock Price	977 – 982
459	Recognition Of Human Anomalies Using Convolution Neural Network	983 – 988
695	Deepretina: A Deep Learning Approach For Diabetic Retinopathy Detection And Stage Classification	989 – 993
8	Cross Border Secure Messaging With Blockchain - A Global Perspective	994 – 998
714	Planetary Defense Using Machine Learning Early Warning Systems For Hazardous Asteroids	999 – 1004
699	Secure Data Transmission Using Steganography By Aes Algorithm	1005 – 1010
653	Revolutionizing Leather Quality Assurance Through Deep Learning Powered Precision In Defect Detection And Segmentation By A Comparative Analysis Of Mask Rcnn And Yolov8	1011 – 1016
745	Web-Based Deep Learning Model For Zero Day Vulnerability Detection Using Fastapi	1017 – 1022
235	A Contemporary Cnn Implanted Deep Learning Framework For Crop Protection From Animal Intrusion In Farming Environment	1023 – 1027
562	Eeg-Based Seizure Prediction Using Cnn And Bi-Lstm Algorithm Of Deep Learning	1028 – 1033
685	Enhancing Intrusion Detection System (Ids) Through Deep Packet Inspection (Dpi) With Machine Learning Approaches	1034 – 1040
487	Al Voice Assistant Using Python And API	1041 – 1046
260	Real-Time Hand Gesture Recognition And Sentence Generation For Deaf And Non-Verbal Communication	1047 – 1052
433	Flight Delay Prediction For Air Travel Management Using Artificial Neural Network Compared With Auto Regressive Integrated Moving Average Algorithm	1053 – 1057
617	Predicting Macro-Economic Factors Of Wti Crude Oil Using Monte Carlo Simulation	1058 – 1064
346	Generalized Multilingual Ai-Powered System For Detecting Fake News In India:  A Comparative Analysis Of Machine Learning Algorithms	1065 – 1070
536	Aroute: A Smart Guide For Campus Exploration	1071 – 1076
278	Pomegranate Grading Using Different Feature Extraction And Machine Learning Approaches	1077 – 1082

384	Utilizing A Deep Learning Model's Hotspot Detection Technique For Uterine	1083 – 1088
	Cancer Image Segmentation	
386	Crafting Trust With Convolutional Neural Networks And Hyperparameter Tuning	1089 - 1094
	For Precision Signature Verification In Insurance Claim	
508	Deep Learning For Personalized Treatment Strategies In Colorectal Tumor	1095 – 1101
	Patients	
220	An Intelligent System For Skin Cancer Detection Using Deep Learning	1102 - 1106
	Techniques	
388	Hybrid Deep Learning And Feature Engineering For Early Detection Of	1107 – 1112
	Melanoma Skin Cancer Using Multimodal Imaging Data	
594	Ml Based Valve Regulation For Optimal Water Relies Based On Root Zone Soil	1113 – 1118
	Moisture	
509	Online Doctor Consultation And Automatic Medicine Dispensers In Primary	1119 – 1123
	Health Care Centres Using Machine Learning	
619	Early Detection Of Adhd In Children Using Two Learning Approach	1124 – 1129
590	Predictive Modelling Of Physical Activity Intensity Using Deep Neural Networks	1130 – 1135
513	Optitime: Ai-Powered Faculty Scheduler For Peak Productivity	1136 – 1141
196	Enhancing Diagnostic Accuracy In Lung Disease: A Vit Approach	1142 - 1147
485	Advanced Predictive Model for Cardiovascular Diseases Using Machine Learning	1148 – 1153
771	Finger Vein Extraction And Authentication For Security Purpose Based On Cnn	1154 – 1159
488	Unveiling Sentiments: Analyzing Learner's Experience Using Vader And Roberta	1160 – 1164
	Models	
760	Adaptive & Fine-Grained Domain Adaptation For Pavement Crack Segmentation	1165 – 1171
	Using Yolov8 Learning Framework	
755	Brain Tumor Detection Based On Deep Learning Neural Network Using Mri	1172 – 1176
456	Revolutionizing Summarization: Unleashing the Power of Transformer-Based	1177 – 1182
	Innovations for Efficiency and Impactful Applications	