

2024 International Conference on Emerging Technologies in Computer Science for Interdisciplinary Applications (ICETCS 2024)

**Bengaluru, India
22-23 April 2024**



**IEEE Catalog Number: CFP24UN4-POD
ISBN: 979-8-3503-7251-9**

**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:	CFP24UN4-POD
ISBN (Print-On-Demand):	979-8-3503-7251-9
ISBN (Online):	979-8-3503-7250-2

Additional Copies of This Publication Are Available From:

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

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

SL.No	eCF Paper Id	Paper / Article Title	Page Numbers
1	ICETCS2024-101	BIOWATCH : DETECTING THE LAKE POLLUTION TO SAFEGAURD BIOTIC LIFE	1 to 6
2	ICETCS2024-110	Facial Emotion Detection through OpenCV and CNN	7 to 12
3	ICETCS2024-142	Comparative Analysis of Community Detection Algorithms in Biological Networks	13 to 17
4	ICETCS2024-143	Intelligent Learning Analytics through E-learning	18 to 21
5	ICETCS2024-145	Road Radar: Integrated Road Monitoring and Maintenance System	22 to 26
6	ICETCS2024-146	EMERGENCY AID HUB FOR INSTANT FIRST AID AND EMERGENCY CALL	27 to 32
7	ICETCS2024-153	Integrating SMOTE and LIME Techniques for Enhanced Stroke Prediction using Machine Learning Approaches	33 to 38
8	ICETCS2024-161	UAV Object Detection and Tracking in Video using YOLOv3 and Deepsort	39 to 44
9	ICETCS2024-163	Neural Voice Replication: Multi-speaker Text-to-Speech Synthesizer	45 to 50
10	ICETCS2024-167	Overcoming LLM Challenges using RAG-Driven Precision in Coffee Leaf Disease Remediation	51 to 56
11	ICETCS2024-168	Revolutionizing Quality Control: A Machine Learning Approach for Precise Surface Defect Detection and Localization in Industrial Components	57 to 62
12	ICETCS2024-169	Sign Language Recognition: Advancing Human-Computer Interaction through Machine Learning	63 to 66
13	ICETCS2024-170	Enhancing Healthcare Information Accessibility Through a Generative Medical Chatbot	67 to 70
14	ICETCS2024-183	Knee Osteoarthritis Prediction Using Machine Learning	71 to 76
15	ICETCS2024-186	Beyond Basic Emotions: High-Accuracy Facial Expression Classification Using a CNN-SVM Hybrid Model	77 to 80
16	ICETCS2024-188	Developing a Comprehensive Hybrid Model Utilizing Convolutional Neural Networks and Random Forest for the Advanced Classification of Tomato Rot Disease Severity Stages	81 to 85
17	ICETCS2024-194	Integrating EfficientNet and Fine-Tuned DenseNet Models for Advanced Detection and Classification of Guava Diseases	86 to 90
18	ICETCS2024-200	Early Prediction and Diagnosis Cardiovascular Disease Using Deep Learning Models	91 to 96
19	ICETCS2024-202	Generative Adversarial Approach for Medical Image Synthesis with Context Aware Deep Convolutional Networks	97 to 102
20	ICETCS2024-21	Maximizing Shelf Life Efficiency: Enhancing Sustainability through Smart Food Processing	103 to 107
21	ICETCS2024-212	Identification of Emotions in a given speech audio clip by using ANN	108 to 113
22	ICETCS2024-213	Advancement in Health Monitoring through IOT and PostgreSQL Analytics	114 to 118
23	ICETCS2024-221	Forecasting Airline Customer Satisfaction through the Application of Diverse Machine Learning Algorithms	119 to 123
24	ICETCS2024-223	Smart Thyroid Diagnosis: A Machine Learning Based Interactive System	124 to 128
25	ICETCS2024-230	CNN-Based Hevea Leaf Disease Detection	129 to 133
26	ICETCS2024-231	Navigating Landscapes through AI: A Comparative Study of EfficientNet and MobileNetV2 in Image Classification	134 to 137
27	ICETCS2024-232	Advancing Citrus Disease Diagnosis: Application of EfficientNetB3 for Precise Classification of Orange Tree Pathologies	138 to 141
28	ICETCS2024-239	Stream Flow Prediction: Narmada Basin	142 to 147
29	ICETCS2024-244	Group Person Identification and Communication using DeepLearning	148 to 150
30	ICETCS2024-250	Enhancing Road Safety and ITS Efficiency: A Comprehensive Evaluation of Traffic Sign Detection using YOLOv8	151 to 155
31	ICETCS2024-269	PREDICTION OF EMOTIONS IN KANNADA SENTENCE WITH HOMONYMS	156 to 160

32	ICETCS2024-270	Streamlining of Event Management for Attendees and Organizers	161 to 167
33	ICETCS2024-286	Decentralized File Storage Platform using IPFS and Blockchain	168 to 173
34	ICETCS2024-289	Analysis on Robotic Based Waste Segregation Techniques using Artificial Intelligence	174 to 179
35	ICETCS2024-291	InterviewPal: Elevating Interview Automation with Deep Learning and Natural Language Processing Perspectives	180 to 185
36	ICETCS2024-298	Prognostic Modeling of Diabetes Mellitus in Women: A comparative analysis of Machine Learning algorithms integrating Clinical and Genetic Data	186 to 191
37	ICETCS2024-299	Revised IEEE 802.11 MAC protocol for an Energy Efficient and Optimized Wireless Communication in Wireless Sensor Networks	192 to 196
38	ICETCS2024-303	TEXT-BASED PERSONALITY ASSESSMENT USING DEEP LEARNING TECHNIQUES	197 to 202
39	ICETCS2024-310	Automated Navigation systems for job portals – A Survey on multilingual chatbots and resume builders and parsers	203 to 208
40	ICETCS2024-317	Analysis of Real-Time Cognitive Fatigue Detection Systems for Driver Safety	209 to 214
41	ICETCS2024-321	From MongoDB to React: Unleashing the Power of MERN in E-commerce	215 to 220
42	ICETCS2024-323	Construction of a Biomedical Knowledge Graph using Natural Language Processing	221 to 226
43	ICETCS2024-340	Utilizing Deep Learning to Enhanced Security in the Internet of Medical Things via Intrusion Detection Systems	227 to 232
44	ICETCS2024-342	Comparative Analysis on Deep Learning Models for Plant Disease Detection	233 to 238
45	ICETCS2024-344	Exploring BioClinical BERT's NLP Capabilities with Explainability Techniques	239 to 244
46	ICETCS2024-347	Airline Customer Reviews Analysis and Booking Completion Prediction using Data Visualization and Machine Learning for British Airways	245 to 250
47	ICETCS2024-349	GAN Based Model for Virtual Try On	251 to 257
48	ICETCS2024-353	"Vulnerabilities in Smart Contracts: A Detailed Survey of Detection and Mitigation Methodologies"	258 to 264
49	ICETCS2024-354	Unlocking Efficiency in Agricultural Supply Chains: A Secure and Transparent Approach through Blockchain Technology	265 to 273
50	ICETCS2024-355	Enhancing Wireless Sensor Network Longevity and Security: A Quad-LEACH Approach	274 to 279
51	ICETCS2024-359	Vision Beyond Sight: An AI-Assisted Navigation System in Indoor Environments for the Visually Impaired	280 to 285
52	ICETCS2024-36	An Efficient Mobile Application for Convenient Electric Vehicle	286 to 291
53	ICETCS2024-362	Two-Pronged Intrusion Detection System for MANET	292 to 297
54	ICETCS2024-364	Network Intrusion Detection with feature elimination and selection using deep learning	298 to 303
55	ICETCS2024-365	Design of Low Power SPI Protocol using Clock Gating Techniques	304 to 309
56	ICETCS2024-367	AN EFFECTIVE AND COMPREHENSIVE CROP RECOMMENDATION SYSTEM USING MACHINE LEARNING	310 to 316
57	ICETCS2024-374	Integrative Approach for Epileptic Seizure Detection: A Comparative Analysis	317 to 322
58	ICETCS2024-377	Leveraging Online Social Content for Early Detection of Suicidal Ideation: A Multi-Modal Deep Learning Approach	323 to 329
59	ICETCS2024-382	Pneumonia detection using anterior chest x-ray images	330 to 333
60	ICETCS2024-383	AcademicVid : Academic PDF's to video generation	334 to 338
61	ICETCS2024-386	"Blockchain Based Traceability System For Food Safety"	339 to 344
62	ICETCS2024-388	OBJECT DETECTION USING FLYING DINO IN AUGMENTED REALITY	345 to 350
63	ICETCS2024-393	AI Powered Indicatorless Algorithmic Trading Bot for Cryptocurrency and Financial Market	351 to 356
64	ICETCS2024-396	Intelligent Plant Watering System: Smart city	357 to 360
65	ICETCS2024-397	Hotel Reservation App Integrated with Docker and Jenkins	361 to 366

66	ICETCS2024-402	Blockchain-NFT enabled Privacy and Ownership Protection System for Genomics[POPS-G]	367 to 372
67	ICETCS2024-403	Explainability of Brain Tumor Classification Based on Region	373 to 378
68	ICETCS2024-405	A comprehensive exploration of machine learning in early detection with a focus on lung and pancreatic cancer for revolutionizing cancer diagnostics	379 to 384
69	ICETCS2024-41	Fit - Up	385 to 390
70	ICETCS2024-411	Lokart: Empowering Local Artisans through Mobile E-commerce	391 to 396
71	ICETCS2024-412	Prediction of Tensile Properties from Micro-structure in Metallic Alloys using Machine Learning	397 to 402
72	ICETCS2024-416	Self-Supervised Learning for Melanoma Skin Cancer Diagnosis: Unraveling Representations in Dermoscopic Images	403 to 408
73	ICETCS2024-417	Unlocking Cloud Efficiency: Blockchain DeDuplication Optimizes Storage	409 to 414
74	ICETCS2024-42	The Evolution and Impact of Game Development in the Digital Era	415 to 420
75	ICETCS2024-46	GDPR Compliant ChatGPT Playground	421 to 426
76	ICETCS2024-56	Advancements in Left Ventricular Myocardium Analysis: A Comprehensive Review of Myocardium Segmentation, Fibrosis Detection and Wall Motion Estimation Using Cardiac Magnetic Resonance Imaging	427 to 432
77	ICETCS2024-62	Skin cancer classification using Progressive Growing of Generative Adversarial Network	433 to 438
78	ICETCS2024-70	Integrity Shield: Defending Genuine Goods	439 to 444
79	ICETCS2024-72	Comparing Hindustani Music Raga Prediction Systems using DL and ML Models	445 to 450
80	ICETCS2024-93	Data-Driven Strategies for Enhancing Performance in Indian Premier League: A Case Study of Royal Challengers Bangalore	451 to 456
81	ICETCS2024-95	Enhancing Alzheimer's Disease Detection with Chaotic Moth Flame Optimization Algorithm: A Feature Selection Approach	457 to 462
82	ICETCS2024-97	Blockchain-Powered Charity Integrity System	463 to 468
83	ICETCS2024-99	A Novel Approach for Identification of Arrhythmia using Transfer Learning Approach	469 to 474