

4th International Conference on Distributed Sensing and Intelligent Systems (ICDSIS 2023)

IET Conference Publications 870

Dubai, United Arab Emirates
21 - 23 December 2023

ISBN: 979-8-3313-0361-7

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571

Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2023) by the Institution of Engineering and Technology
All rights reserved.

Printed with permission by Curran Associates, Inc. (2025)

For permission requests, please contact the Institution of Engineering and Technology
at the address below.

Institution of Engineering and Technology
P. O. Box 96
Stevenage, Hertfordshire
U.K. SG1 2SD

Phone: 01-441-438-767-328-328

Fax: 01-441-438-767-328-375

www.theiet.org

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
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Data Encryption in Fog Computing Using Granular Access Control Method.....	1
<i>F. Taher, H. AlHamadi, A. AlShamsi, A. Bugawa</i>	
CNNViT: A Robust Deep Neural Network for Video Anomaly Detection.....	13
<i>N. Garuda, G. Prasad, P. P. Dev, P. Das, E. Ghaderpour</i>	
FNDS- A Machine Learning Based Approach for Fake News Detection and Severity Determination.....	23
<i>E. S. R. S. Reddy, S. P. Kumar, C. Srujan, P. Das</i>	
X-Ray Insights: Innovative Person Identification Through Siamese and Triplet Networks	40
<i>F. Hazem, B. Akram, O. I. Khalaf, R. Sikder, S. Algburi</i>	
Enhancing Security in OpenID Connect Single Sign-On (SSO) Systems: A Comprehensive Vulnerability Analysis and Mitigation Approach	50
<i>M. Al-Shabi, A. Bennour, M. Al-Sarem, O. I. Khalaf, R. Sikder, S. Algburi</i>	
Artificial Intelligence Applications and Their Impact on the Qualitative Characteristics of Data: Evidence from Commercial Banks.....	61
<i>B. A. Bagustari, A. R. Alshehadeh, H. A. Al-Khawaja, N. M. Aljawarneh, S. Alshehadeh</i>	
Exploring the Impact of VR on Students Engagement and Learning Outcomes in Higher Education.....	67
<i>A. Q. Bataineh, I. A. Abu-AlSondos, M. Idris, I. A. Alnajjar, L. Almazaydeh</i>	
Advancements in Diabetes Prediction: A Comprehensive Study Utilizing Advanced Machine Learning Techniques.....	76
<i>M. Al Jaziri, T. Bonny</i>	
Healthcare on Smart Wheels-A Review of Intelligent Vehicles Assisted Healthcare Systems.....	83
<i>A. D. Patel, R. H. Jhaveri, R. S. Rathore</i>	
Evaluating Asthma Symptoms in Relation to Indoor Air Quality: Insights from IoT-Enabled Monitoring.....	90
<i>B. K. Mishra, D. Thakker, R. John, R. R. Kureshi, B. Ahmad, W. Jones, X. Li</i>	
Battery State of Health Estimation in Smart Transportation: A Machine Learning Approach	99
<i>V. Vakharia, P. Nair, H. Borade, A. Purohit, V. Wankhede</i>	
Digital Health and Indoor Air Quality: An IoT-Driven Human-Centred Visualisation Platform for Behavioural Change and Technology Acceptance.....	104
<i>R. R. Kureshi, B. K. Mishra, D. Thakker, S. Mazumdar, X. Li</i>	
Large Language Model-Based Multi-Task UAVs - Towards Distilled Real-Time Interactive Control	114
<i>Y. Feng, H. Snoussi, J. Teng, A. Cherouat, T. Wang</i>	
Analysis of the Cloudlet's Performance in Mobile Cloud Computing (MCC)	119
<i>P. William, R. R. Agwan, O. I. Khalaf, I. H. Jebri, B. Zaqaibeh, S. Algburi</i>	
An Approach of Digital Watermarking Based of DCT/DWT for Color Content.....	126
<i>T. Mekhaznia, A. Chergui</i>	

Tracing the Evolution of Auditing and Digital Accounting Research in the Digital Business Environment: A Bibliometric Analysis	135
<i>N. M. Aljawarneh, Y. A. Huson, T. J. Alqmool, S. I. Jarbou</i>	
Deep Learning Applications to Classify Cross-Topic Natural Language Texts Based on Their Argumentation.....	146
<i>C. P. Kale, P. William, K. A. Ogudo, O. I. Khalaf</i>	
Combating the Masked Menace: A Deep Learning-Powered Surveillance System for Anomaly Detection in Masked Individuals.....	156
<i>A. Hassan, M. Elhoseny, M. Kayed, S. Elnaffar</i>	
Zenoh-Powered Post-Quantum Security: Protecting IoT-Based Smart Surveillance Systems	168
<i>L. Khorkheli, D. Bourne, G. B. Satrya, S. Elnaffar, S. E. Choutri</i>	
Enhancing Dermatology with Machine Learning: A Transfer Learning Perspective	173
<i>M. Al Jaziri, T. Bonny</i>	
Big Data Analytics for Business Sustainability: Review Study.....	181
<i>I. Akour, M. Elhoseny, A. Al-Amawi, A. Akila</i>	
Smartphone-Based Object Recognition Application for Educational Engagement.....	197
<i>H. M. Fadhil, A. Muayad, S. Majid, M. M. J. Husain</i>	
Twitter-Based Sentiment Analysis on Russia-Ukraine War.....	211
<i>S. Dutta, A. Bhattacharya, Y. Totaj, A. Beluli, D. Samanta, B. P. Etemi</i>	
Multi-Industrial Applications of Cloud and Intelligent Edge Computing in Smart Cities.....	216
<i>P. B. N. Kiran, P. William, K. A. Ogudo, O. I. Khalaf</i>	
Enhancing Natural Language Processing with Machine Learning for Conversational AI	229
<i>A. Q. Bataineh, I. A. Abu-AlSondos, L. Almazaydeh, S. S. El Mokdad, M. Allahham</i>	
Real-Time Text Recognition and Text-To-Speech Processing System for Visually Impaired.....	238
<i>D. Parasar, Y. Jadhav, A. Patel, J. Shah</i>	
AI Implementations in Cloud-Based Sign-In Logs to Detect Brute Force Attack Attempts	245
<i>A. AlQahtani, F. Taher</i>	
Benchmarking of Deep Learning Techniques in FDIA	255
<i>B. Alsaid, Y. Badway, O. A. Waraga, M. A. Talib, Q. Nasir</i>	
Auto-Classification of Harmonized Tariff Codes Using ChatGPT.....	262
<i>A. Hussain, A. Ahmed</i>	
Mitigating Supply Chain Risks Through AI Integration: The Mediation Role of Data-Driven Decision Culture.....	276
<i>M. A. K. Alsmairat, M. S. A. Hammad</i>	
Framework for Artificial Intelligence Based Monitoring of Energy and Waste Management Using Machine Learning Approach	286
<i>O. I. Khalaf, A. B. Pawar, P. William, K. A. Ogudo</i>	
Nexus Between Digital Transformation and Firm Performance: Evidence from Jordan	297
<i>M. H. Makhoul, S. AlMalahmeh</i>	

Review of Visual AI Applications in Smart Surveillance for Crime Detection and Prevention: A Survey.....	307
<i>H. A. AlSuwaidi, S. Harous, M. A. Serhani</i>	
Lexicon-Enhanced Machine Learning Techniques for Predicting Risks in Cryptocurrencies.....	321
<i>A. Darwiesh, M. Elhoseny, A. H. El-Baz, M. A. Nour</i>	
Organizational Process of Choice, a Case Study of Resource Allocation in the University Sector.....	325
<i>M. G. Abdul Razzaq</i>	
Analysis and Visualization of Scientific Research on Islamic Banking and Artificial Intelligence	341
<i>E. Skibińska, T. Tayachi</i>	
Levy Swallow Swarm Optimization with Machine Learning-Based Intrusion Detection in IIoT	353
<i>A. Alzahrani</i>	
A Glimpse into AI in HRM and Supply Chains During and Post COVID-19.....	360
<i>N. F. Easa, M. M. Eldahamsheh, R. A. El Khatib</i>	
Measuring the Impact of Social Media Influencers and Digital Marketing on Tourist Behavior in Jordan	376
<i>F. Omeish, M. Abuhashesh, R. Badran, M. T. Alshurideh</i>	
Flamingo Search Algorithm with Optimal Deep Learning for Automated Cyber Threat Detection in IoT Environments.....	410
<i>M. M. Asiri</i>	
Exploring an IOT-Based Smart Charging Algorithm for Electric Vehicles Considering Multiprocessing	418
<i>P. William, K. S. Shashikala, O. I. Khalaf, I. H. Jebri, B. Zaqibeh, S. Algburi</i>	
Predicting Energy Consumption Through Deep Learning-Powered Time Series Analysis.....	424
<i>Z. Touati-Hamad, M. R. Laouar</i>	
FHE-Blockchain: Enhance the Scheme for Secret Sharing of IoMT Data Using Decentralized Techniques.....	435
<i>S. Kumar, A. Kumar, L. S. Ambati, R. Gaur, K. Abhishek</i>	
Microscopic Insights into Autonomous Vehicles' Impact on Travel Time and Vehicle Delay.....	442
<i>A. Almusawi, M. Albdairi, S. S. S. M. Qadri</i>	
Blockchain in Circular Economy: A Short Survey	451
<i>R. Alnajdawi, M. Elhoseny, A. Clark, T. Gaber</i>	
Waste Generation Forecasting Using Mobility Data During COVID-19 Pandemic.....	461
<i>A. T. Fathabadi, A. Abdeljaber, M. Abdallah, M. A. Talib, M. Maraqa</i>	
Dysphonia Measurements for Diagnosis of Parkinson's Disease Using Optimized Machine Learning Techniques.....	472
<i>R. K. Yadav, S. Sharma, A. Patil, R. Jayaswal, S. Patil, K. Kotecha</i>	
An Energy Efficient System for Unmanned Aerial Vehicle-Based Surveillance.....	480
<i>N. Bhuvu, V. Devre, P. Sharma, D. Pujara, M. Roy</i>	
Interpretable Deep Learning: Evaluating YOLO Models and XAI Techniques for Video Annotation	487
<i>S. I. Mokdad, A. Khalid, D. Nasr, M. A. Talib</i>	

Synergies of Federated Learning and Blockchain for Patient-Centric Sustainable Next Generation Healthcare Through Distributed Medical Internet of Things.....	497
<i>S. Manna, A. Sarkar, M. Z. Khan, A. Noor</i>	
Secure E-Governmental Information Management in Smart Internet of Things (IoT) Applications	507
<i>H. Elhoseny, M. Elhoseny, I. Reda, H. Elbakry</i>	
Prediction of High Blood Pressure Using Machine Learning Techniques.....	513
<i>F. Taher, N. Prakash, A. AlShamsi</i>	
EcoSavvy: Revolutionizing Waste Management in Smart Cities	518
<i>H. M. Fadhil, A. J. Oribe, M. K. Jwaid, M. M. J. Hussain</i>	
Multiple Disease Prediction Models for Healthcare Systems Using Machine Learning Algorithms: A Comparative Study	536
<i>I. Y. AbuShawish, A. Boureidane, S. Foufou</i>	
Decentralized Implementations of SDN-Controllers in SDN-FANETs: A Survey	544
<i>A. Eljack, M. A. Talib, S. Abbas, Q. Nasir</i>	
Adaptive Security and Predictive Risk Control System Using Machine Learning	552
<i>N. A. Tamimi, N. Prakash, F. Taher</i>	
Federated Intelligence for Intrusion Detection and Unifying Health Prediction in IoHT	556
<i>A. Noor, T. H. Noor</i>	
Improved Deep Learning-Based Contactless Biometric Recognition Using Bracelet Lines.....	567
<i>R. Duggal, A. Pandya, R. S. Rathore, K. Kalra, K. Sharma, N. Gupta</i>	
Android Malware Detection and Classification Using Stacked Machine Learning	575
<i>F. Nawshin, R. Gad, D. Unal, P. N. Suganthan</i>	
TCP Variants for Internet of Things: A Survey.....	585
<i>Y. Mansour, H. Alfalasi, S. Abbas, M. A. Talib</i>	

Author Index