

# **2023 International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT 2023)**

**Faridabad, India  
23-24 November 2023**

**Pages 1-711**



**IEEE Catalog Number: CFP23UC4-POD  
ISBN: 979-8-3503-4439-4**

**Copyright © 2023 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:	CFP23UC4-POD
ISBN (Print-On-Demand):	979-8-3503-4439-4
ISBN (Online):	979-8-3503-4438-7

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## TABLE OF CONTENTS

Design of a Compact Hexagonal Wideband Antenna for Modern WiMAX, Wi-Fi, and IoT Applications.....	1
<i>Anushka Singh, Abhishek Sharma, Sandeep Sharma, Rashmi Roges, Risheek Kumar Mishra</i>	
Artificial Intelligence and Internet of Things: A Boon for the Crime Prevention.....	7
<i>Hemant Kumar Saini, Kussum, Mandeep</i>	
Sign Language Detection Using CNN-YOLOv8l.....	12
<i>Chiranjeev Singh, Dolly Sharma, Aditya Prakash Dubey, Neha Tyagi</i>	
Arduino-Based Real-Time Obstacle Detection in Vehicles Using Proximity Sensors .....	18
<i>Meenu Gupta, Rakesh Kumar, Sunaina Das, Rohan Sharma, Ahmed J. Obaid</i>	
A Hybrid Resume Parser and Matcher Using RegEx and NER .....	24
<i>Gurushantha Murthy G R, Shinu Abhi, Rashmi Agarwal</i>	
Art Generation AI Model for Low-End Devices .....	30
<i>Seema Verma, Vasudha Arora, Thinakaran Perumal</i>	
Surrounding Light Intensity Detection Web App with OpenCV and Streamlit.....	36
<i>Kanishka Sharma, Madhulika Bhatia, Aman Deep Kaur, Rosy Madaan</i>	
Enhancing Image Clarity Using Deep Dehazing Architecture .....	40
<i>Rajat Tiwari, Bhawna Goyal, Ayush Dogra</i>	
Enhancing Breast Cancer Diagnosis: A Deep Belief Network Approach for Mammography Image Analysis.....	46
<i>Venkata Raghuvveer Burugadda, V. C. Patil, Narayan Vyas, Aradhya Pokhriyal</i>	
Mobile Application Using CNN for Skin Disease Classification with User Privacy .....	52
<i>Muhammad Zunnurain Hussain, Muhammad Zulkifl Hasan, Summaira Nosheen, Muhammad Musa Khan, Mohammad Sufyan, Ali Qureshi, Adeel Ahmad Siddiqui, Zaima Mubarak, Afshan Bilal, Muhammad Atif Yaqub, Muzzamil Mustafa, Saad Hussain Chuhan</i>	
An Optimized Resnet Based Plant Disease Identification Using Deep Learning Hypothetic Function.....	58
<i>Gurleen Kaur, Preeti, Hemant Kumar Saini</i>	
Unconsciousness Detection Alarm for Driver Using Viola–Jones Object Detection Framework.....	64
<i>Akshay Kumar Kushwaha, Aman Chaturvedi, Anubhav Kumar, Madan Lal Saini</i>	
Exploring the Effectiveness of Various Deep Learning Techniques for Text Generation in Natural Language Processing .....	70
<i>Baljap Singh, Anubhav Kumar, Satjap Kaur, Shashank Shekhar, Gurwinder Singh</i>	
A Logistic Regression Approach for Detecting Phishing Websites .....	76
<i>Sparsh Mittal, Raghav Agarwal, Madan Lal Saini, Anubhav Kumar</i>	
Disease Diagnosis and Diet Plan Recommendation Using KNN Model.....	82
<i>Chinni Roshini Durga, Sandeep Vemuri, Veeranki Kavya Lahari</i>	

Emerging Technology for Smart Farming in the Agriculture Domain: Application and Future Perspective.....	88
<i>Preethi Konduru, Mukesh Kuamr Tripathi, Dipali Khairnar, Priyadarshini Patil, Madhavi Patil, Ghongade Prashant</i>	
Breast Cancer Prediction Using Machine Learning Algorithms.....	94
<i>Sandeep Kumar Saini, Ujjawal Parmar, Garima Chandel</i>	
Predictive Modeling for Early Detection of Diabetes Using Machine Learning Approach .....	100
<i>Rakesh Kumar, Meenu Gupta, Nitin Tamak, Swapnil Thakare</i>	
Machine Learning Models Can Help Early Disease Detection in Medicinal Plants .....	106
<i>Priti Bhowmik, Pushpa, Deepak Kumar, Nishtha Madaan, Nidhi Didwania, Sasanka Kalita, Kunal Dagar, Jeetendra Kumar Vaishya</i>	
An Efficient Brain Tumor Classification using CNN and Transfer Learning.....	113
<i>R. Sasikala, V. Deepa, K. Agalya, P Vijay Anand, S. Brindasri, R. Nareshkumar</i>	
Performing Semantic Analysis of Short Descriptive Answers Using NLP.....	118
<i>Pradeep Kumar Shah, Bhuvana J</i>	
Improving UHVDC Wall Bearings Electric Reliability: Grading Ring Optimization and Field Investigation .....	123
<i>Prashant Kumar, D. Anandhasilambarasan, Brijesh Kumar, P. Karthigaikumar, Anup Ingle</i>	
A Systematic Review for Cardiovascular Disease Detection Using Machine Learning Methods.....	133
<i>Gorapalli Srinivasa Rao, G. Muneeswari</i>	
ChatGPT: Exploring the Capabilities and Limitations of a Large Language Model for Conversational AI.....	139
<i>Nikhil Kumar Gupta, Anil Chaudhary, Rishabh Singh, Rahul Singh</i>	
Artificial Intelligence Based Real Time Surveillance and Object Localization System.....	143
<i>Ruchirangad Kapoor, Rahul Kumar, Aarchishya Kapoor, Rajiv Kapoor, Gurumurthy</i>	
Machine Learning Based Sentiment Analysis of Tweets.....	148
<i>Harsh Khatter, Niyati Aggrawal, Ajay Kumar Shrivastava</i>	
Analyzing the Health Data: An Application of High Utility Itemset Mining .....	153
<i>Kadium Padmavathi, Sumalatha Saleti, Sai Saran Tottempudi</i>	
Survey on Machine Learning Techniques Used for Central Serous Retinopathy Detection .....	159
<i>M. Suba, S. Nirmala Sugirtha Rajini, M. Anand</i>	
E-Commerce: The Enhancement with the Integration of AR and VR.....	163
<i>Anurag, Rajsimar Singh, Pranav Sharma, Vishal Dutt</i>	
A Novel Classification Approach for Smart Card Fraud Detection.....	169
<i>Chandana Gouri Tekkali, Karthika Natarajan, Valiveti Manikanta Bhuvanesh</i>	
A Comprehensive Study and Analysis of Frequent Itemsets Mining Algorithms Using Diverse Real Datasets .....	174
<i>Anshu Singla, Parul Gandhi</i>	
Potato Disease Detection Through Leafs: Leveraging Deep Learning Algorithms for Accurate Diagnosis.....	181
<i>Parveen Badoni, Gurleen Kaur, Malik Muzamil Ishaq, Ranjan Walia</i>	

Generative AI for Software Test Modelling with a Focus on ERP Software.....	187
<i>Anshumaan Garg, Dolly Sharma</i>	
Loan Prediction Using Machine Learning.....	194
<i>Hemanth Kumar Sarisa, Varun Khurana, Venkat Chandu Koti, Neha Garg</i>	
Design of an Efficient Deep Learning Model for Segmentation and Classification of Psoriasis and Vitiligo Skin Diseases.....	199
<i>Dasari Anantha Reddy, Saroj Shambharkar, Dipti Chaudhari, Kandi Jyothsna, Rachna K. Somkunwar, Amireddy Srinish Reddy</i>	
Enhancing Public Safety with AI-Powered Intelligent Surveillance: An Examination of Immediate Incident Detection and Rapid Response in Urban Settings .....	205
<i>S. Chakradhar Amingad, Morathoti Rahul, P. S. Sathvik Reddy, N Sujata Gupta</i>	
Adaptive Video Quality Control for Smart CCTV Systems .....	211
<i>Yashwanth Madavaram, Rishika Reddy Madireddy, Soma Sai, Nukala Sujata Gupta, Saroja Kumar Rout</i>	
Predicting Sentiment on IMDB Using ML and DL Techniques .....	218
<i>Ashwin Tomar, Harjot Singh Kaler, Anubhav Kumar</i>	
Technological Advances in Green Human Resource Management Using Machine Learning .....	224
<i>Hemant Kumar Saini, Kapil Bhardwaj, Sakshi Gupta</i>	
Adaptive Neuro-Fuzzy Controller Based Electric Vehicle Battery Charging System .....	230
<i>Sundeep Siddula</i>	
A Qualitative Analysis for Predicting the Future of Auto Text Summarization in Natural Language Processing.....	236
<i>Sugam Kumar Singh, Neeru Sharma</i>	
Drowsiness Detection and Alert System Using DLib.....	242
<i>Vidushi Singhal, Nitasha Soni, Kanika Khatri, Bhavesh Kumar Chokkar, Krishan Kumar</i>	
A Novel Approach for Accident Detection and Localization Using Deep Learning .....	247
<i>Manisha Mudgal, Deepika Punj, Anuradha Pillai</i>	
Identification and Diagnoses of Plant Diseases in Fruit Crops Using Machine Learning Algorithms .....	253
<i>Anushka Singh, Monika Jain, Aprna Tripathi</i>	
Hypothyreosis Prediction Using Feature Scaling Technique in ML.....	258
<i>P. Saraswathi, M. Prabha, T. S. Santhoshini, P. R. Nega</i>	
A Deep Learning Approach to Forest Fire Detection and Monitoring .....	263
<i>Sarang Bathalapalli, P. Krishna Prasad, Ramesh Ponnala</i>	
Leveraging Machine Learning Techniques to Estimate Airline Ticket Pricing .....	269
<i>Chanugomula Shiva Kumar, Ramesh Ponnala</i>	
Hybrid Models for PCOS Prediction Using Machine Learning Algorithms to Address Class Imbalance .....	275
<i>Madyala Chandana, Ramesh Ponnala, B. Indira</i>	
AI-IOT: Integrating Artificial Intelligence & Internet of Things for Healthcare Systems.....	281
<i>Sunita Joshi, Neha Gupta, Sathak Burmi, Yash Sharma</i>	

Diabetes Prediction System Using Machine Learning .....	286
<i>Kundan Kumar, Arjit Tomar</i>	
Answer Relevance Score (ARS): Novel Evaluation Metric for Question Answering System .....	292
<i>Tanu Gupta, Ela Kumar</i>	
Optimization Techniques Used in Heart Disease Prediction: A Systematic Analysis.....	297
<i>Priyanka Behki, Rishi Pal</i>	
To Study Traffic Behaviors for Detecting Unusual Activities by Analyzing HTTP Packets .....	303
<i>Pooja Deswal, Dr. Niranjan Lal, Dr. Mayank Singh</i>	
An Explainable Deep Learning Intrusion Detection in IoT-Enabled Transportation Networks .....	310
<i>Aman Barthwal, Supriya Raheja</i>	
Ensemble Boosting Algorithms for Software Defect Prediction .....	321
<i>Dusa Sai Kiran, Ramesh Ponnala</i>	
A Real-Time IoT Based Fall Detection and Alert System for Elderly .....	327
<i>Ghattamaneni Mahesh, M. Kalidas</i>	
A Comparative Study of Machine Learning Approaches for Cyber Bullying Detection in Digital Forums.....	332
<i>Dharanikota Sai Rohini, M. Ramchander</i>	
Driver's Drowsiness Detection System Using Machine Learning .....	339
<i>Jaswinder Kaur, Ramesh Ponnala</i>	
An Empirical Investigation of the World Happiness Report: The Effect of Religiosity, Suicide Rate and Human Development .....	344
<i>Balkrishna Shrestha, Bhim Prasad Rajbanshi, Shailesh Bahadur Pandey</i>	
Location-Based Measure for Relative Influence of Papers in NLP .....	349
<i>Md. Mobasshir Aalam, Shailesh Pandey</i>	
Enhancing Face Emotion Recognition Through LBP, SIFT Boosted CNN Classification.....	356
<i>Keerthi Gabbireddy, Mehfooza Munavar Basha</i>	
New Machine Learning Model to Movie Recommender and Sentiment Analysis.....	363
<i>Raja Marappan, Saraswatikaniga R</i>	
Recommender Systems and Analysis of Large-Scale Online Social Networks.....	367
<i>Raja Marappan, Saraswatikaniga R</i>	
User Engagement in Financial Education on Metaverse .....	372
<i>Rashmy Moray</i>	
Traffic Sign Board Prediction Using Ensemble Model of YOLOv8 and Detectron2.....	378
<i>Abhilasha Sharma, Prabhat Ranjan</i>	
An Efficient Model to Detect the Presence of Hinglish Text in YouTube Data.....	385
<i>Ayeena Bhalla, Anupama Chadha</i>	
Text Data Augmentation .....	392
<i>Deepali Joshi, Aryan Shinde, Shreya Das, Om Deokar, Dipasha Shetiya, Simran Jagtap</i>	

Analysis of Computational Intelligence Techniques for COVID-19 Prediction.....	402
<i>Vandana Kalra, Megha Khanna, Ankita Bansal, Uday Sharma, Priyanshi Ahuja, Om Gupta, Saarthak Tuli</i>	
A Case Study on BERT Models for Aspect Based Sentiment Analysis.....	408
<i>Geetanjali Tanwar, Clarence Franklin, Deepak G</i>	
Smart Recycling Robot: Vision-Driven Autonomous Water Bottle Collection System Using YOLOv5.....	413
<i>Premanand Ghadekar, Yash Shaligram, Vaishnavi Shimpi, Omkar Shingade, Shristi Singh, Shiya Thakur</i>	
Bitcoin Price Analysis with Deep Learning Models.....	419
<i>Doddamani John Vestly, Neelima Thangallapelly, Gandra Sai Manish, Shanmugasundaram Hariharan, Vinay Kukreja, Jayakshatha Pr</i>	
Improving Precision Agriculture by Appropriate Measurement of Fertilizers with Drones.....	425
<i>Jagadeesh Gopalakrishnan, Sahana Shri Anand, Sneka Mani, Shanmugasundaram Hariharan, Vinay Kukreja, S. V. Vasantha</i>	
An Abstractive Summarization and Conversation Bot Using T5 and Its Variants.....	432
<i>Sudharson D, K. S. Thrisha Vaishnavi, S. Hariprakassh, B. Abiram, K. Saranya, Poonam Tanwar</i>	
Analyzing Bitcoin Blockchain Data: Insights, Coefficients and Model Adequacy .....	438
<i>Amit Kumar, Neha Sharma, Rahul Chauhan, Manish Sharma</i>	
Object Detection in Medical Diagnosis of Cows Using Convolutional Neural Network.....	446
<i>Sanu Kumar, Ishaan Asthana, Mukul Nair, Deepa Bura, Dasari Gowthami, Kritika Soni</i>	
Mapping Smart Vertical Farming in Cultivation of Herbaceous Medicinal Plants Using Bibliometric Analysis.....	453
<i>Monica Dutta, P S Metkewar, Rajesh Kumar Dhanaraj, Deepali Gupta, Sapna Juneja</i>	
ESSS: Energy Saver Smart Shoes for Energy Harvesting Using Multi-Sensors Technique.....	460
<i>Mudita Uppal, P S Metkewar, Rajesh Kumar Dhanaraj, Kanwalpreet Kour, Deepali Gupta, Shilpa Saini</i>	
Estimating the Future Demand for Manufacturing Goods Using Time Series Forecasting Approach .....	466
<i>Kamal Chabra, Rajender Kumar, Manoj Nayak</i>	
Impact of Machine Learning on Sales Forecasting Accuracy .....	472
<i>Om Bijalwan, Anamika Arora, Rahul Chauhan, Chandradeep Bhatt, Hemant Porkhariya</i>	
Content Based Movie Recommendation System Using Machine Learning Algorithm.....	477
<i>Rahul Chauhan, Krunal N. Vaghela, Riya Bisht, Chandradeep Bhatt, Deepak Verma</i>	
Risk Factor Analysis in Breast Cancer Using Principal Component Analysis .....	482
<i>Charanpreet Kaur, Rosy Madaan</i>	
Facial Expression Recognition in the Wild Using Artificial Rabbits Optimizer Based Residual Neural Network .....	488
<i>P S Metkewar, N Uma, Rajesh Kumar Dhanaraj, Balasubramanian Prabhu Kavin, Malathy Sathyamoorthy</i>	

Feature Extraction from Text Using Grasshopper Optimization Algorithm for Identifying Hate Speech .....	494
<i>Anu Dhankhar, Amresh Prakash, Sapna Juneja</i>	
Federated Learning and Decentralized IoT Cooperation.....	499
<i>Dinesh Kumar, Vijaya Krishna, Manju Bargavi S. K</i>	
LPS-ML: Loan Prediction System Using Machine Learning.....	503
<i>Rajnish Kumar, Jabez Solomon, Aayush Pandey, Ishaan Dawar, Megha Bhushan, Arun Negi</i>	
An Interdisciplinary Approach for Evaluation of Green Building Index.....	509
<i>Yaman Hooda, Haobam Derit Singh, Jimmy Mehta, Abhiruchi Passi, Sahil Mehta</i>	
An Integrated Fire Detection and Extinguishing System Using IoT .....	513
<i>Sanu Kumar, Ishaan Asthana, Mukul Nair, Dasari Gowthami, Shweta Sharma, Poonam Tanwar</i>	
Deep Learning-Based Algorithm for Identifying and Detecting Brain Glioma Tumors.....	520
<i>Neha Sharma, Amarnath Singh, Rahul Chauhan, Dipra Mitra, Sunil Gupta, Manish Sharma</i>	
An Effective Method for the Compression of Images Used in Virtual Environments.....	525
<i>Vivek Arya, Meet Kumari, Rahul Chauhan, Neha Sharma, Amit Kumar, Manish Sharma</i>	
Hyperledger Fabric as a Secure Blockchain Solution for Healthcare 4.0 Framework .....	530
<i>Salna Joy, Baby Chithra R, Neethu P S, Anju M. I, Kavita Avinash Patil, Amarjeet Pal Cheema, M Keerthana Lal</i>	
Power Quality Improvement and Harmonics Reduction Method Using Neural Fuzzy Logic Controller in Two-Stage Pv-Battery System .....	537
<i>M. Hariprabhu, R. Mythili, Chairma Lakshmi K R</i>	
Machine Learning for 5G Security Using Random Forest .....	544
<i>Gayatri S. Chavhan, Asakti Rautkar, Jitendra Prithviraj, Rahul Agrawal, Nekita Chavhan, Chetan Dhule</i>	
Smart Mushroom Cultivation: Enhancing Growth Conditions Through Sensor-Based Monitoring .....	550
<i>Ishaan Rana, Ankit Gupta, Rakshit Mittal, Harshita Chaudhary, Shobha Tyagi, Pronika Chawla</i>	
A Novel Technique for Hand Gesture Recognition .....	556
<i>Kumud Sachdeva, Rajan Sachdeva</i>	
Interpreting Scope of Predictive Analytics in Advanced Driving Assistant System.....	561
<i>Roudrak Saha, Aryan Debray, Vandana Sharma, Sushruta Mishra, Mahmoud Ahmad Al-Khasawneh, Ahmed Alkhayyat</i>	
Unlocking the Potential of Machine Learning in Indian Small and Medium Enterprises (SMES) and an Examination of Outcomes in the Knowledge Management Process .....	567
<i>Sheela G, Rajini G</i>	
Identification of Individual from Group Photo Using Face Recognition .....	572
<i>Vijay Mane, Suhas Bhise, Pratik Dhane, Dhanraj Shelke, Prashant Dheple, Shivani Dhumal</i>	
A Machine Learning Techniques for Early Autism Spectrum Disorder Detection Through Comparative Analysis of Feature Engineering and Classification Models.....	577
<i>T. Abirami, Shrikant Mapari, P. Jayadharshini, M. Kavipriya, T. Kavin, V. S. Kanagasubramaniyan</i>	



Early Detection of Cervical Cancer Using Machine Learning Classifiers for Improved Diagnosis in Underserved Regions.....	582
<i>S. Santhiya, Shrikant Mapari, N. Abinaya, P. Jayadharshini, S. Priyanka, Lalitha Krishnasamy</i>	
A High Accuracy Deep Learning and Iot Network for Pest Detection Using Analysis of the Pest Sound in Large Agriculture Area.....	588
<i>Md. Akkas Ali, Anupam Kumar Sharma, Rajesh Kumar Dhanaraj</i>	
A Novel Deep Convolutional Neural Network for Alzheimer's Disease Prediction Using MRI Scans.....	594
<i>Tejaswee Vavaladas, G. N. R. Prasad</i>	
Real Time Video Object Detection Using Deep Learning.....	601
<i>Kunal Sharma, Tanmay Kumar Sahu, Prateek Bhatt, Aniket Kumar Singh, Madhulika Bhatia</i>	
E-Commerce Platform for Ethnic Regional Retailers .....	607
<i>K. Bhanu Prakash Reddy, B. Sandeep Naidu, Shefali Singhal</i>	
Beyond the Internet of Things: Imagining IoT's Structure and Potential Routes .....	612
<i>Varalakshmi K R, Mahesh Tr, Akhilendra Pratap Singh</i>	
Translational Deep Learning-Based Diagnostics: Enhancing Pathology with AI .....	619
<i>Ashwini B, Deepak Kumar Sinha, Chetan Chaudhary</i>	
AI-Powered Developments in Oncological Diagnostic Imaging: Revolutionary Approaches to Cancer Treatment .....	625
<i>Shweta Singh, Ashwini B, Vivek V</i>	
Latency Minimization in 5G Network Backhaul Links Using Chaotic Algorithms.....	630
<i>K. G. Shanthy, Jayanthi. N, Mohammed Ali Sohail, M. Dinesh Babu, Chairma Lakshmi K R, B. Mritthula</i>	
Plant Leaf Disease Classification Based on SVM Based Densenets.....	636
<i>Susmita Sarkar, Jhimlee Adhikari Ray, Chiradeep Mukherjee, Sudipta Ghosh, Jayanthi. N, Chairma Lakshmi K R</i>	
Machine Learning for Fake News Detection on Social Media Text.....	642
<i>Aditya Bhogi, Anjani Dasari, Nikita Sharma, Neha Garg</i>	
Taxonomy of Multi-Agent Systems Attacks and Their Defense Tactics in Certifying Security of Cyber Physical Systems .....	648
<i>Garima Jain, N. R Solomon Jebaraj</i>	
Image Decomposition for Object Detection in Low-Light Environment.....	653
<i>Kavinder Singh, Anil Singh Parihar</i>	
Forecasting Oil Production Using Regression and Ensemble Algorithms .....	659
<i>Ch V Raghavendran, S K Mahaboob Basha, T. R. Mani Chigurupati, R V S Lalitha</i>	
An Overview of Methodologies and Prototypes Involved in Speech Recognition Systems .....	665
<i>Ananta Ojha, Ritu Pal, Raman Batra</i>	
Predictive Modeling for Autism Spectrum Disorder: Leveraging Machine Learning Algorithms to Assess Likelihood from Multifactorial Features .....	670
<i>Praveen Kumar, Rahul Dwedi, Mohd Izhah Alam, Shadab Akhter, Kunal Kumar</i>	

An Overview of Deployment of Information and Communications Technology (ICT) in Disaster Risk Management.....	676
<i>M N Nachappa, Himanshu Sharma, Ritu Pal</i>	
Prediction of Colon Cancer Disease with the Handling of Outliers and Overfitting Through Neural Network Clustering and Optimal Tuning .....	681
<i>Christopher Francis Britto</i>	
Deep Learning-Based Multiclass Anomaly Detection in the IoT_GPS_Tracker Dataset: Unveiling Patterns for Enhanced Tracking Accuracy.....	687
<i>Yousef Qawqzeh, Wejdan Samaraa</i>	
Radiological Imaging Techniques Using Dwt Methodology.....	691
<i>R. Kishore Kanna, Pradeep Kumar, A. Ambikapathy, Akhilesh Singh, Adnan Allwi Ftaiet</i>	
Data Extraction, Attacks and Protection on Android Clipboard.....	696
<i>Pradeep Kumar Tiwari</i>	
Designing IoT-Enabled Circuits for Non-Contact Liquid Infusion in Infectious Patient Care.....	701
<i>Amit Kumar, Pooja Pathak, Vijay Kumar Dwivedi, Dilip Kumar Sharma</i>	
Deep Learning Based Bagged CNN with Whale Optimization Algorithm to Forecast the Productivity of Rice Crop Using Soil Nutrients.....	707
<i>M. Chandrababha, Rajesh Kumar Dhanaraj</i>	
An Intelligent System for Vehicle Collision Avoidance System Using Internet of Things.....	712
<i>Anup Lal Yadav, Sandip Kumar Goyal</i>	
Demystifying Fake News Detection Methods.....	718
<i>Priyanka Rastogi, Anisha, Tapas Kumar</i>	
Liquid Neural Networks: A Novel Approach to Dynamic Information Processing.....	725
<i>Kushagra Kumar, Amit Verma, Nikhil Gupta, Abhishek Yadav</i>	
Experiment Based Study to Enhance the Security of Cyber Space.....	731
<i>Akshay Mudgal, Shaveta Bhatia</i>	
Enhancing Traffic Flow Efficiency and Mitigating Congestion Through ML-Based Traffic Management Strategies .....	737
<i>Nikhil Gupta, Sweety Saawan, Saurabh Kumar, Md Ubaid Khan</i>	
Safety of Autonomous Systems Using Reinforcement Learning: A Comprehensive Survey.....	744
<i>Manju, Chhavi Rana, Mamta Dahiya</i>	
AI Based Chatbot for Healthcare Using Machine Learning.....	751
<i>Poonam Tanwar, Karan Bansal, Ankur Sharma, Nirbhay Dagar</i>	
Embedded Cognition in Virtual Environments: An Ecological Approach to AI Study .....	756
<i>Jun-Ki Chung, Bharat Singh, Alok Singh Sengar, K. Ranjit Singh, C. Mukuntharaj, M. P Karnik</i>	
Comparative Analysis of Generative AI Models .....	760
<i>Geeta Rani, Jagjit Singh, Abhishek Khanna</i>	
Analysing Role of Databases in COVID-19 Epidemic .....	766
<i>Namrata Sukhija, Neha Kohli, Shivani Batra, Vaishali Arya, Prakash Srivastava, Amit Gahlot</i>	

Design and Development of Application for Children Suffering from Autism Spectrum Disorder Using Machine Learning .....	772
<i>Varnika Bir, Akshat Bhatt, Sanidhya Chauhan, Poonam, Tanwar</i>	
Explore Deep Learning Trends by Decoding Activated Networks.....	778
<i>K Gowri, MP Sunil, Rakesh Kumar Yadav</i>	
Fostering Smart Agriculture: Using Vision-Based AI for Livestock Managing .....	784
<i>Gaurav Shukla, K Gowri, Gadug Sudhamsu</i>	
Wireless Liberty: Sensors Measuring Pressure and Temperature .....	791
<i>Pavan Chaudhary, M Vanithalakshmi, K N Raja Praveen</i>	
Advanced Aerial Network Nodes for Next-Generation Wireless Infrastructure.....	797
<i>Abhirup Bhawal, M K Ranganathaswamy, Trapty Agrawal</i>	
Unmanned Aerial Vehicle-Aided Auditory Intrusion Detection Systems: An Experimental Exploration .....	802
<i>Abhirup Bhawal, Nagaraj Patil, Trapty Agrawal</i>	
Applying DMLP and HMM in Speech Identification Platforms .....	808
<i>Manju Bargavi, Rishi Singhal, Javed Moazzam</i>	
Implementation of Different Technologies for Detection of Accident-Spots .....	813
<i>Arti Badhoutiya</i>	
Evolution and Advancement of Quantum Computing in the Era of Networking and Cryptography .....	817
<i>Javed Moazzam, Rahul Pawar, Mayank Deep Khare</i>	
Solicitations of ML Paradigms in Soft Robotic Applications: An Inclusive Review .....	822
<i>Kumud Saxena, Vaibhavi Painuly, J Bhuvana</i>	
Personalized Recommendation After Classification of Tweets to Predict Depression Using Sentiment Analysis .....	827
<i>Manish Joshi, J Bhuvana</i>	
Coverage Schemes in Wireless Sensor Networks: A Review .....	833
<i>Vivek Arya, Neha Sharma, Meet Kumari, Abhineet Anand, Rahul Chauhan</i>	
A Circularly Polarized Four Port MIMO Antenna with Split Ring Metamaterial for Dual Band IoT Applications.....	839
<i>Maruti R. Jadhav, Uttam L Bombale</i>	
HUMSAFAR: Woman Safety Device with Tracking Using ARDUINO.....	847
<i>Anirban Chakraborty, Sayantan Aich, Swarnabha Mallik, Tiya Dey Malakar, Arpita Ghosh</i>	
A Potential Ensemble Technique with Hybrid Featured Selection for Impalpable Intrusion Detection .....	853
<i>Hemant Kumar Saini, Mandeep Kaur, Kussum, Utkarsh Singh</i>	
A Comprehensive Approach to Aquatic Environment Monitoring: IoT-Based Smart Aquarium System .....	859
<i>Premanand Ghadekar, Sarthak Khare, Dhawal Sakharwade, Chinmay Saraf, Pranav Sonkamble, Amruta Amune</i>	
Blockchain-Powered Secure Federated Learning for Privacy-Preserving Communication .....	865
<i>Madhav Ojha, Mukul Aggrawal, Ajay Pandey, Ansh Awasthi</i>	

A Review on Zero Knowledge Proof Vulnerabilities in Zcash.....	872
<i>Shobha Tyagi, Shobha Tyagi</i>	
5G Technology Empowering Wireless Technology.....	878
<i>Soham Basuri, Aditya Parida, Sushruta Mishra, Vandana Sharma, Mahmoud Ahmad Al-Khasawneh, Ahmed Alkhayyat</i>	
Fuzzy Based Hybrid Clustering Using Dual Cluster Heads (FHCDCH) for Wireless Sensor Networks .....	884
<i>Roma Saxena, Akhtar Husain</i>	
Secured Normalized Tagged Response for Patient Critical Care Monitoring System: A Unified Approach .....	890
<i>Soubraylu Sivakumar, B. Sai Vinay, A. Arulmurugan, U. M. Prakash, T. Rajesh Kumar, S. Sridevi</i>	
Battlefield Health Surveillance with Soldier Tracking: A Privacy-Preserving Encrypted Approach .....	896
<i>Kiran Ingale, Sanaya Vaze, Varad Uttarwar, Samarth Urane, Samarth Thosar, Tavishi Mahajan</i>	
Effective Co-Operation in Edge-Cloud Computation Networking.....	904
<i>Mahesh T R, Savita, Renuka Bhagwat</i>	
Analysis of the Status Quo of Artificial Intelligence: Society .....	911
<i>Vidhu Kiran Sharma, Y P S Berwal, Sanjay Dahiya</i>	
Service-Centric Architectures in Cloud Security: An In-Depth Analysis .....	917
<i>Natya S, Vivek V, Dhananjay Kumar Yadav</i>	
Cloud Deployment Unveiled: A Security Model Focused on Industry .....	923
<i>Rakesh Kumar Yadav, Natya S, Mahesh T R</i>	
Managing Cloud Networks: A Classification of SDN-Enabled Clouds .....	929
<i>Vaishali Singh, Kehkeshan Jallal S, Sunanda Das</i>	
A Smote Based Heart Disease Prediction Approach Using Conventional Models.....	934
<i>Saumya Bansal, Rakhee</i>	
Cloud Process Optimization: A Hybrid GA-PSO Methodology.....	938
<i>Divya Rani M S, Savitha R, Preeti Naval</i>	
AI Approaches for Pulmonary Disease Forecast .....	944
<i>Awakash Mishra, Saurav Ganguly, Sandeep Kumar C</i>	
AI in Disease Avoidance: Recognition, Therapy and Healthcare .....	950
<i>Mohammed Aarif K O, Uzma Noor Shah, Trapy Agrawal</i>	
Analysis and Implementation of DDOS Attacks and Prevention .....	956
<i>Aman Sharma, Pronika Chawla, Shobha Tyagi, Monika Goyal, Neha Chaudhary, Pinki Sagar</i>	
Improved Deep Learning Laryngeal Tumour Identification.....	962
<i>Mohammad Shahnawaz Hussain, Malathi H, Savita</i>	
Leveraging Knowledge of Previous Baskets to Anticipate Online Buyer Behaviour.....	968
<i>Priyank Sirohi, Niraj Singhal, Pradeep Kumar, Mahboob Alam</i>	

Integration of AI in the Realm of Software Development.....	974
<i>Bhuvana J, Vivek Ranjan, Nirmednra Bhaduariya</i>	
A Comprehensive Review on Probable Measures for Addressing Security Limitations in Internet of Drones .....	979
<i>Gaurav Gupta, C Menaka, Padmanabhan P</i>	
Natural Language Processing for Prediction of Disaster Tweets Using Ensemble Learning .....	985
<i>Mohit Chowdhary, Poonam Nandal</i>	
OIDs: A Smart Framework for Intrusion Detection in 5G WSN's by Using Ontology .....	991
<i>Sover Singh Bisht, Anuj Singh Rajput, Sanjeev Kumar Mandal</i>	
Color Depiction and Push Notification System for Daily Sounds.....	996
<i>Pranava Krishna Bijjarapu, Naveen Kumar Saini, Sidharth Yadav Arra, Shashi Kumar Nune, David Bheemagari, G. Charles Babu</i>	
Application of Machine Learning in Investigating the Impact of Green HRM Practices in Sustainability of an Organization .....	1001
<i>Malkit Singh, Sandeep Singh, Aman Jandwani</i>	
CallerId Application Design Using Amazon Web Services.....	1006
<i>Shourya Chawla, Mohd. Abuzer, Abhinav Singh, Dolly Sharma</i>	
False - Face Challenge Response Authentication Automated Test Using Anthropomorphic Images .....	1012
<i>K. Sathya, K. Kalaiselvi, A. Hency Juliet</i>	
Ethical and Social Consequences of Computer Vision and AI-Integrated IoT Technologies in the Medical Ecosystem.....	1018
<i>Ruchir Saxena, Vikas Sharma, Munish Gupta</i>	
Automatic Street Light System Using Arduino & LDR Sensor .....	1024
<i>Palomi Gawli, Sagar Pawar, Gaurav Warjurkar, Swami Gele, Srushti Somane, Atharv Nagare</i>	
Migration and Scheduling of Virtual Machines (VM) Using Priority Based Load Balancing in Cloud Environment .....	1029
<i>Feon Jaison, Gulista Khan</i>	
Leveraging Blockchain Technology and Knowledge Management for Enhancing Sustainable Organizational Performance in India .....	1034
<i>Sheela G, Rajini G</i>	
Enhancing Water Efficiency and Crop Yield in Agriculture Sector Using IoT.....	1039
<i>Parveen Badoni, Simran Kaur, Babita Sharma, Ranjan Walia</i>	
A Tour of DDoS Attack Using Machine Learning Techniques Under One Umbrella .....	1045
<i>Hemant Kumar Saini, Kapil Bhardwaj, Gurleen Kaur, Utkarsh Singh</i>	
A Preliminary Study on Information Technology Startup Challenges and Their Plausible Solutions from Lean-Agile Methodology.....	1051
<i>Eswar Prasad Manapuram, Truptha Shankar</i>	
Emperical Study of Energy-Efficient Routing Protocol for Internet of Things .....	1057
<i>Sonia Singh, Neha Gupta</i>	

IOT Enabled E-Vehicles for Developing Smart Transportation System.....	1063
<i>Sanghmitra Gopal, Priyanka Gupta, Manu Sharma, Deepak Kaushal, Sudhanshu Joshi, Bhanu Sharma</i>	
A Survey on E-Voting System Using Blockchain Technology .....	1069
<i>Prashant Kumbharkar, Samruddha Pawtekar, Sharayu Javeer, Pranav Abhale</i>	
A Lightweight Security with Key Distribution Method in Mobile Ad-Hoc Networks.....	1076
<i>Ashish Kumar Soni, Rajendra Gupta, Ankur Khare</i>	
Implementation of a Privately Operated Blockchain Utilizing the Multichain Open Source Platform.....	1083
<i>Amit Kumar, Neha Sharma, Rahul Chauhan</i>	
Smart IOT Based Dustbin and Waste Monitoring System.....	1088
<i>Palomi Gawali, Swarup Shinde, Janhvi Tambolkar, Gauri Shinde, Sujal Sawant</i>	
Review of LoRaWAN Enabled Air Quality Assessment Systems for Smart Building Applications.....	1094
<i>Jagriti Saini, Maitreyee Dutta, Gonçalo Marques</i>	
Enhancing Healthcare Delivery in India: Emergency Medical Care and Patient History Management.....	1099
<i>Shweta M. Kambare, Phalesh D. Kolpe, Sanket D. Patil, Abhishek M. Pote, Siddhesh S. Patil, Prerna D. Kokate</i>	
Emerging QoS Strategies: A Comprehensive Overview of Clustering Techniques in IoT-Equipped WSNs.....	1105
<i>Sonia Singh, Neha Gupta</i>	
Towards a Greener Tomorrow: IoT-Enabled Smart Environment Monitoring Systems.....	1112
<i>Leena Arya, Yogesh Kumar Sharma, Ramakrishna Kumar</i>	
Enhancing Cloud Security: A Deep Cryptographic Analysis .....	1118
<i>Ashish Govindrao Deshpande, C. Srinivasan, Ramakrishnan Raman, S. Rajarajan, Rachit Adhvaryu</i>	
5G and IoT for Smart Stadium Operations for Enhancing Fan Experience and Safety.....	1128
<i>Ramakrishnan Raman, Akansha Singh</i>	
Enhancing Security of Cloud Computing Transaction Using Blockchain.....	1133
<i>Navjot Singh Talwandi, Navpreet Kaur Walia</i>	
Metric Suite for Event-Driven Software Systems .....	1140
<i>Ruchika Malthora, Madhukar Cherukuri</i>	
Streamlined Deployment and Monitoring of Cloud-Native Applications on AWS with Kubernetes Prometheus Grafana .....	1149
<i>T. Abirami, Shrikant Mapari, P. Jayadharshini, Lalitha Krishnasamy, R. Ragavendra Vigneshwaran</i>	
Honeypot Networks in Deception Technology for IOT Devices.....	1156
<i>Deepti Sharma, Amandeep Singh, Shikhar Chitkara, Tanmay Sharma</i>	
Visualizing Wellness: The Impact of Deep Learning on Healthcare Image Analysis.....	1163
<i>Deepak Kumar Sinha, Preeti Naval, Samreen Fiza</i>	

Biometric Employee Identification Using Mobile Devices: ICT Integration of Attendance Monitoring System (AMS) and Human Resource Information System (HRIS) .....	1169
<i>Priyanka Gupta, Sanghmitra Gopal, Manu Sharma, Sudhanshu Joshi, Deepak Kaushal, Girish Lakhera, Navneet Rawat, Bhanu Sharma</i>	
Enhancing Efficiency in Industrial Environments Through IoT Connected Worker Solutions: Smart Wearable Technologies for the Workplace .....	1175
<i>Abhishek Mishra, Janmejai Kumar Shah, Rajat Sharma, Manu Sharma, Sudhanshu Joshi, Deepak Kaushal</i>	
Advancing 6G Networks: The Implications of Edge AI Integration .....	1180
<i>Hannah Jessie Rani R, Awakash Mishra, Noel Prashant Ratchagar</i>	
Advanced Channel Modelling for 6G Gigabit Small-Cell Systems (GBSMS) .....	1186
<i>Noel Prashant Ratchagar, K. Gopala Krishna, Awakash Mishra</i>	
Interpretable Melanoma Detection Utilizing Stacked Modeling Approach.....	1192
<i>Mohammad Shahnawaz Hussain, Malathi H, Savita</i>	
Latency Reduction in mmWave VLSI Circuits Through Gravitational Learning .....	1197
<i>K. G. Shanthi, M. S. Kavitha, P. Rajeswari, Jayanthi. N, Sunil Kumar, S D Lalitha</i>	
Optimized Vector Perturbation Precoding with 5G Networks and Levy Flights.....	1203
<i>G. S. Satheesh Kumar, S. Sathish Kumar, N. Naveena, K. Selvaraj, V. Saravanan, B. Sarala</i>	
Incorporation of Deep Learning (DL) Techniques to Make Intelligent and Adaptable Wireless Communication Systems .....	1209
<i>Anamika Tiwari, Sandeep Kumar, A Rengarajan</i>	
An Efficient Approach of Pneumonia Detection Using Transfer Learning Models, RCNN and FAST RCNN .....	1214
<i>M. Santhoshi, J. Jyostna</i>	
A Comprehensive Review of Scheduling and Optimization Paradigms in Cloud Systems.....	1220
<i>Mayank Deep Khare, Riya Kukreti, Feon Jaison</i>	
A Review of Implementing Exploring Mobile Edge Computing Within the Framework of 5G and 6G Networks.....	1225
<i>Raman Batra, Sanjeev Kumar, Manju Bargavi</i>	
An Exploratory Study on Fuzzy Image Processing.....	1231
<i>Romisha Romisha, Shruti Vashist</i>	
Machine Learning Based of Cardiac Attack Prediction Application .....	1235
<i>R. Kishore Kanna, Pradeep Kumar, Ambikapathy Ambikapathy, Akhilesh Singh, Mustafa Asaad Hussein</i>	
An Optimized Approach for Tumor Detection Using Co-Occurrence Matrix and Back Propagation Neural Network .....	1240
<i>Vineet Saxena, Menaka J</i>	
Comprehensive Study on ChatGPT Sentiment Analysis and Visualization .....	1244
<i>Himanshu R. Katrojar, Siddhesh D. Atkar, Shreepad R. Raut, Harsh N. Bhoge, Rahul Agrawal, Chetan Dhule</i>	
Sleep Apnea Detection – a Comparative Study and Efficient Solution with Modified LeNet-5 .....	1249
<i>Ronit Sikri, Pooja Gupta</i>	

Feature Vector Generation for Content Based Image Retrieval.....	1255
<i>M N Nachappa, Ajay Rastogi</i>	
Identification and Analysis of Email Spam Using Filtering Techniques .....	1260
<i>Ananta Ojha, Ajay Chakravarty</i>	
The Meta-Analysis AI in Cervical Cancer Detection and Diagnosis.....	1264
<i>Trapty Agrawal, Abhirup Bhawal, Kavina Ganapathy</i>	
An Extensive Review of Optimized Energy Saving Approaches for Green Cloud Computing (GCC) .....	1270
<i>Deepak Mehta, Amit Kumar Tripathi, Javed Moazzam</i>	
Facial Expression Based User Concentration Alert System .....	1275
<i>Ginni Arora, Garima Adlakha, Rashmi Joshi, Mohit Batra, Tanisha Sarkar, Meghna Luthra</i>	
Swarm Optimization Framework for Energy-Efficient Allocation of Industrial IoT Resources .....	1280
<i>Shalu Saraswat, Surendra Mahajan, Ritesh V. Patil</i>	
Blockchain-Enabled Communication Network Transforms Information Technologies: A Thematic Analysis .....	1286
<i>Janmejai Kumar Shah, Rajat Sharma, Abhishek Misra, Manu Sharma, Sudhanshu Joshi</i>	
Rule-Based Approach in Aspect-Based Sentiment Analysis of Hindi Text.....	1292
<i>Vijay Kumar, Soni Smita Selot</i>	
Performance Analysis of Decision Tree Models and M5P Models for Mobile Phone Price Prediction .....	1298
<i>Amit Kumar Bishnoi, Sanjeev Kumar Mandal</i>	
Investigating Efficacy of RNN and Its Variants for AQI Forecasting .....	1303
<i>Darakhshan Khan, Archana B. Patankar, Ruchika Motwani, Aditya Ailsinghani</i>	
EmoNet: Exploring Facial Emotion Recognition Through Machine Learning .....	1308
<i>Manaswi Karadbhajne, Mayuri Gomkale, Chavhan Nekita A, Rahul Agrawal, Chetan Dhule</i>	
Integration of AI, Digital Twin and Internet of Medical Things (IoMT) for Healthcare 5.0: A Bibliometric Analysis .....	1313
<i>Bhanu Sharma, Deepak Kaushal, Manu Sharma, Sudhanshu Joshi, Sanghmitra Gopal, Priyanka Gupta</i>	
Predict the Temperature Rise Using Facebook's Prophet Model.....	1319
<i>Sagar Tewari, Amarinder Kaur, Nirpendra Narayan Das, Madhulika Bhatia</i>	
Movies Recommendation System Using Machine Learning Algorithms.....	1324
<i>Zohaib Tahir, Kunwar Babar Ali</i>	
A Comparative Study of CNNs and DNNs for Emotion Detection from Text Using TF-IDF .....	1329
<i>Anil Kumar Jadon, Suresh Kumar</i>	
Interactive Data Visualization Platform to Present Effective Teacher Performance with Power BI.....	1335
<i>Vaishnavi Deshmukh, Jitendra Prithviraj, Asakti Rautkar, Rahul Agrawal, Chetan Dhule, Nekita Chavhan</i>	
Ensemble Classifier for Pediatric Pneumonia Diagnosis in Chest X-Ray Images .....	1340
<i>Vaishali Arya, Tapas Kumar</i>	



Analysis of Soil Categorization for Improving Productivity with Machine Learning.....	1346
<i>Arko Bagchi, Prashant Johri</i>	
Aqua Forecast: Machine Learning for Water Quality Prediction .....	1352
<i>Manik Deosarkar, Pratik Tekawade, Mayank Themaskar, Raza Uwais, Vaibhavi Bhosale, Mohit Thengre</i>	
Enhanced Safety in the Cloud Through ECC and Admission Restriction .....	1358
<i>Vaishali Singh, Aruna M, M N Varun Somanna</i>	
IoT Driven Air Quality Surveillance and Forecasting .....	1364
<i>Daljeet Pal Singh, Aruna M, M N Varun Somanna</i>	
Enhancing Non-Destructive Examining of Composite Materials Using Lightweight Structures and Machine Learning.....	1369
<i>Prashant Kumar Gangwar, Balachandra Pattanaik, Madijagan M, Mohammed Ali Sohail, M. Dinesh Babu, B. Sarala</i>	
Privacy Preservation and Secured Data Storage on Cloud Using Encryption Algorithms .....	1374
<i>Puninder Kaur, Rajwinder Kaur, Amandeep Kaur, Vidhu Kiran Sharma</i>	
Reassessing Deep Learning in Time Series: Predicting Time with Foresight .....	1379
<i>Vinutha C B, Vivek V, Megha Pandeya</i>	
An Outline of Data Encryption Standard (DES) Tools and Its Facets Within the Realm of Cloud Computing.....	1385
<i>Riya Kukreti, Kavitha R, Apoorva Joshi</i>	
Application of Machine Learning and Cloud Computing for Observing Health Status of Patients Remotely in Healthcare System .....	1391
<i>Manivasagam, Anshu Kumar, Mohd. Murshleen</i>	
Deep Learning for Forex and Stock Price Forecasting: Uncovering Market Secrets .....	1397
<i>Akhilendra Pratap Singh, Amrutha V Nair, Varalakshmi S</i>	
Unmasking Embedded Text: A Deep Dive into Scene Image Analysis.....	1403
<i>Ashi Maheshwari, Reema Ajmera, Dinesh Kumar Dharamdasani</i>	
BERT-Based Natural Language Processing System for Online Social Information Retrieval on Illness Tracking .....	1409
<i>Mohit Chowdhary, Poonam Nandal</i>	

**Author Index**