

2024 Second International Conference on Advanced Computing & Communication Technologies (ICACCTech 2024)

**Sonipat, India
16-17 November 2024**

Pages 1-457



**IEEE Catalog Number: CFP24UN0-POD
ISBN: 979-8-3315-1906-3**

**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:	CFP24UN0-POD
ISBN (Print-On-Demand):	979-8-3315-1906-3
ISBN (Online):	979-8-3315-1905-6

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

2024 Second International Conference on Advanced Computing & Communication Technologies (ICACCTech) **ICACCTech 2024**

Table of Contents

Message from General Chairs	xxii
Message from Program Chairs	xxiii
Message from the Technical Program Co-Chair	xxiv
Organizers and Collaborators	xxv
Organizing Committee	xxvi
Program Committee	xxvii
Reviewers	xxix

Artificial Intelligence and Machine Learning

Sentiment Analysis: An In-Depth Review of Current Insights, Challenges, and Open Issues	1
<i>Sumit Kumar Baberwal (Bennett University), Nitin Arvind Shelke (Bennett University), and Khalid Anwar (Bennett University)</i>	
Applications of Explainable AI	8
<i>Kirtpreet Kaur (Chandigarh University, India), Aarushi Bansal (Chandigarh University, India), and Zeba Afroz (IIIT Delhi, India)</i>	
Artificial Intelligence as a Tool for Graphic's Production Process	16
<i>Rahul Arora (Chandigarh University, Mohali) and Kamaljeet Kaur (Chandigarh University, Mohali)</i>	
Real-Time Bus Driver Monitoring System Using Machine Learning	22
<i>Anil Kadu (Vishwakarma Institute of Technology, India), Rajnandini Dharashive (Vishwakarma Institute of Technology, India), Rachit Nimje (Vishwakarma Institute of Technology, India), Arya Rajvaidya (Vishwakarma Institute of Technology, India), Sanket Palkar (Vishwakarma Institute of Technology, India), and Vijay Gaikwad (Vishwakarma Institute of Technology, India)</i>	
Automated Extraction of Company Names from Product Label Images: A Text Mining Approach .	30
<i>Gaurav Kholiya (Graphic Era Hill University, India), Vimal Joshi (Graphic Era Hill University, India), Sanyam Pandey (Graphic Era Hill University, India), Sashank Thapa (Graphic Era Hill University, India), Vikrant Sharma (Graphic Era Hill University; Graphic Era Deemed to be University, India), and Satvik Vats (Graphic Era Hill University; Graphic Era Deemed to be University, India)</i>	

Dynamic Playlist Generation using AI	35
<i>Parth Awasthi (Chandigarh University, India), Bharti Sahu (Chandigarh University, India), Samrista Rath (Chandigarh University, India), Vinit Mittal (Chandigarh University, India), and Lavesb Bhardwaj (Chandigarh University, India)</i>	
Identifying Cross-Site Scripting Attacks through Machine Learning	40
<i>Perumandla Rohith Goud (Chandigarh University, India), Odedara Ashish Rambhai (Chandigarh University, India), and Hashmat Fida (Chandigarh University, India)</i>	
Hindi Text-to-Image Generation: A Diverse Data Collection Methods, Annotation Approaches and Challenges	47
<i>Nakkala Srinivas Mudiraj (Central University of Punjab, India) and Satwinder Singh (Central University of Punjab, India)</i>	
Implementation of Models for Demand Forecasting for E-Commerce using Time Series Forecasting	56
<i>Narinder Yadav (Chandigarh University, India), Abhishek Roushan (Chandigarh University, India), Vatsala Singh (Chandigarh University, India), Neha Kumari (Chandigarh University, India), and Diksha Diksha (Chandigarh University, India)</i>	
Unveiling the Nature of Emotions: Human Emotions Vs Sentiment Analysis Using Natural Language Processing	63
<i>Barnana Das (B.M. Institute of Engineering and Technology, India), Kashish Jain (B.M. Institute of Engineering and Technology, India), Aman Kumar (B.M. Institute of Engineering and Technology, India), Naman Jain (B.M. Institute of Engineering and Technology, India), Gurminder Kaur (B.M. Institute of Engineering and Technology, India), and Vishal Jain (B.M. Institute of Engineering and Technology, India)</i>	
Streamlining Talent Acquisition: A Machine Learning Approach to Automated Resume Screening.	69
<i>Priti Singla (Chandigarh University, India), Jaspreet Kaur (Chandigarh University, India), Anju Sinhmar (Chandigarh University, India), Aditya Soni (Chandigarh University, India), Aditya Tuteja (Chandigarh University, India), and Sachin Sharma (Chandigarh University, India)</i>	

Computer Vision and Image Processing

Age and Gender Prediction from Facial Images Using Inception V3 Architecture	76
<i>Senbagavalli M (Alliance University, India), Kishan Reddy L (Alliance University, India), and Dileep Kumar A (Alliance University, India)</i>	
A Smart Prediction Model for Age and Gender from Facial Images Using CNN	84
<i>Senbagavalli M (Alliance University, India), P. Bhavish Reddy (Alliance University, India), and K. Rahul (Alliance University, India)</i>	

Enhanced Video Mosaic Generation: Efficient ORB Feature Extraction and Hamming Distance Matching	92
<i>Shridhar H (Department of Electronics and Communication Engineering, Government Engineering College, India), Sunil S. Harakannanavar (Department of Electronics and Communication Engineering, Nitte Meenakshi Institute of Technology, Karnataka), Chetan R (Department of Electronics and Communication Engineering Shri, Madhwa Vadiraja Institute of Technology & Management, India), Vidyashree Kanabur (Department of Electronics and Communication Engineering, National Institute of Technology, Mangalore), Jayalaxmi H (Department of Electronics and Communication Engineering, Acharya Institute of Technology, India), and Prashanth C R (Department of Electronics and Communication Engineering, S J B Institute of Technology, India)</i>	
An Automated System for Classification of Audio Clips using Deep Learning Model	98
<i>Senbagavalli M (Alliance University, India), Rajagopal R (Alliance University, India), Gopi Satya Krishna Chadamgatti (Alliance University, India), Rudi Leela Chand (Alliance University, India), and Gajjala Mani Vardhan Reddy (Alliance University, India)</i>	
Optimized Image Mosaicing using ORB with Histogram Equalization for Real-Time Applications..	105
<i>Shridhar H (Department of Electronics and Communication Engineering, Government Engineering College, India), Sunil S. Harakannanavar (Department of Electronics and Communication Engineering, Nitte Meenakshi Institute of Technology, Karnataka), Chetan R (Department of Electronics and Communication Engineering, Shri Madhwa Vadiraja Institute of Technology & Management, India), Vidyashree Kanabur (Department of Electronics and Communication Engineering, National Institute of Technology, Mangalore), Jayalaxmi H (Department of Electronics and Communication Engineering, Acharya Institute of Technology, India), and Prashanth C R (Department of Electronics and Communication Engineering, S J B Institute of Technology, India)</i>	
Combining GLCM Features with SVM Classification for Improved Accuracy in Cotton Crop Disease Detection	110
<i>Rajesh Kumar (Chaudhary Devi Lal University, India) and Vikram Singh (Chaudhary Devi Lal University, India)</i>	
Single Image Super-Resolution using a Recalibrated SRGAN and Transfer Learning	116
<i>Vijay Bharti (Maharishi Markandeshwar (Deemed to be University), India) and Rohini Goel (Maharishi Markandeshwar (Deemed to be University), India)</i>	
An Deduplication Model to Enhance Image Retrieval Efficiency through Hashing and Deep Learning (IDME-IR)	126
<i>Priya Vij (Maharishi Markandeshwar (Deemed to be University), India) and Dalip Dalip (Maharishi Markandeshwar (Deemed to be University), India)</i>	
Gesture-Driven Interface Redefinition: Enhancing Accessibility with a Virtual Mouse System...	132
<i>Geetika Saini (Chandigarh University, India), Reeya Ottalwar (Chandigarh University, India), Kriti Upadhyay (Chandigarh University, India), and Gurpreet Kaur (Chandigarh University, India)</i>	
Real-Time Scratched Image Restoration Using Neural Networks	137
<i>Harsh Sharma (Chandigarh University, India), Rajeshwari Pradhan (Chandigarh University, India), Harsh Mogha (Chandigarh University, India), Shivpratap Singh (Chandigarh University, India), and Rupesh Kumar (Chandigarh University, India)</i>	

SVM and MSVM for Plant Disease Detection: A Comparative Study	143
<i>Rajesh Kumar (Chaudhary Devi Lal University, India) and Vikram Singh (Chaudhary Devi Lal University, India)</i>	
Comparative Assessment of Brain Tumor Detection Techniques: A Comparative Study	148
<i>Pooja Dahiya (Kurukshetra University, India), Anshu Sharma (Kurukshetra University, India), Manisha Sharma (Kurukshetra University, India), and Vijay Bharti (Department of Computer Science and Engineering Apiit SD India, India)</i>	

Cybersecurity and Blockchain

Transformative Potential and Ethical Challenges: AI Driven Innovations in Cyber Security	155
<i>Parveen Badoni (Chandigarh University Mohali, India), Manoj Wadhwa (Chandigarh University Mohali, India), Vijay Mohan Shrimal (Chandigarh University Mohali, India), and Neha Dutta (Chandigarh University Mohali, India)</i>	
Mitigating Distributed Denial of Service (DDoS) Attacks in Cloud Networks Using Neural Networks	161
<i>Jagendra Singh (Bennett University, India), Jabir Ali (Bennett University, India), Preeti Sharma (Department of CSE (DS), Raj Kumar Goel Institute of Technology, India), Vinish Kumar (Department of CSE (AI-ML), Raj Kumar Goel Institute of Technology, India), Meenakshi Sharma (Department of Electronics & Communication Engineering, Inderprastha Engineering College, India), and Ramendra Singh (Department of Computer Science and Engineering (IoT), Raj Kumar Goel Institute of Technology, India)</i>	
Predictive Modelling of Malware Behavior using Machine Learning Algorithms	167
<i>Kirtpreet Kaur (Chandigarh University, India), Aarushi Bansal (Chandigarh University, India), and Krishnendu Rarhi (Chandigarh University, India)</i>	
A New Secure Color Image Encryption Based on Confusion and Diffusion Encryption Mechanism	174
<i>Kirtpreet Kaur (Chandigarh University, India) and Krishnendu Rarhi (Chandigarh University, India)</i>	
Block Verify: Generation and Validation of e-Certificate using Blockchain	180
<i>Swati Jadhav (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Daksh Jadhav (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Shivendra Jadhav (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Jiva Shelke (Department of Computer Engineering, Vishwakarma Institute of Technology, India), and Dheeraj Kakade (Department of Computer Engineering, Vishwakarma Institute of Technology, India)</i>	
Securing Authenticity: A Frontier Block Chain-Powered Fake Product Detection via QR Codes	188
<i>Dileep M R (Nitte Meenakshi Institute of Technology, India), Sathvic A (Nitte Meenakshi Institute of Technology, India), and Mohamed Ghouse Shukur (King Khalid University, Kingdom of Saudi Arabia)</i>	

Drone Regulation: Decentralized Registration Framework with Blockchain Technology	195
<i>Sashank Thapa (Graphic Era Hill University, India), Gaurav Kholiya (Graphic Era Hill University, India), Vikrant Sharma (Graphic Era Hill University; Graphic Era Deemed to be University, India), and Satvik Vats (Graphic Era Hill University; Graphic Era Deemed to be University, India)</i>	
Leveraging Blockchain Technology for Enhanced Government Services, Transparency, and Administrative Efficiency	202
<i>Shweta Dewangan (Department of Commerce, ICFAI University, India), Geetha Manoharan (SR University, India), Animesh Kumar Sharma (Department of Science, ICFAI University, India), Sanjeev Kumar (Lovely Professional University, India), and Mohammad Badruddoza Talukder (International University of Business Agriculture and Technology, Bangladesh)</i>	
Automated Network Vulnerability Assessment with Nmap: A Comprehensive Approach	208
<i>Arshdeep Singh (Chandigarh University, India), Er. Swati Sharma (Chandigarh University, India), Bgv Krishna Reddy (Chandigarh University, India), Prince Soni (Chandigarh University, India), Samarjit Singh Ghuman (Chandigarh University, India), and Udaybir Singh Gill (Chandigarh University, India)</i>	
Advancing Digital Forensics: Harnessing Blockchain for Evidence Authentication	215
<i>Kanika Pandit (Chandigarh University, India) and Renu Mahajan (Chandigarh University, India)</i>	
Network Intrusion Detection System: Machine Learning Approach	222
<i>Ishaan Garg (Amity University Uttar Pradesh, India), Priyansh Sharma (Amity University Uttar Pradesh, India), Gurveer Singh (Amity University Uttar Pradesh, India), Purushottam Sharma (Galgotias University, India), and Vansh Sharma (Amity University Uttar Pradesh, India)</i>	
Blockchain Stationed Managerial Framework For Logistics & Oblige Chain Direction For Reliable Data Control	230
<i>Khushi Jain (Computer Science and Engineering, B. M Institute of Engineering and Technology, India), Chirag Chirag (Computer Science and Engineering, B. M Institute of Engineering and Technology, India), Harish Kumar Mittal (Computer Science and Engineering, B. M Institute of Engineering and Technology, India), Sonika Vasesi (Computer Science and Engineering, B. M Institute of Engineering and Technology, India), Paramjeet Paramjeet (Computer Science and Engineering, B. M Institute of Engineering and Technology, India), and Jatin Kumar (Computer Science and Engineering, B. M Institute of Engineering and Technology, India)</i>	

Data Science, Analytics, and Cloud Computing

Impact of Artificial Intelligence on the Efficacy of Talent Acquisition: A Quantitative Study from the Perspective of Recruiter	238
<i>Shafali Kashyap (Chandigarh University, India) and Ashita Chadha (Chandigarh University, India)</i>	

Stock Price Forecasting Using NASDAQ and Google Trend	244
<i>Bijesh Dhyani (Graphic Era (Deemed to be University), India), Shobhit Bisht (Graphic Era (Deemed to be University), India), Akansha Sharma (Graphic Era (Deemed to be University), India), Chandra Prakash (Graphic Era (Deemed to be University), India), and Rajesh Tiwari (Graphic Era (Deemed to be University), India)</i>	
An Empirical Analysis of the Surge in Erotic Content on OTT Platforms During the COVID-19 Lockdown: Insights from the Uttarakhand Region	250
<i>Vidushi Negi (Amity University, India), Himani Binjola (Graphic Era Hill University, India), Rajesh Tiwari (Graphic Era (Deemed to be University), India), Vivek Chamoli (Graphic Era Hill University, India), Shweta Bajaj (Graphic Era (Deemed to be University), India), and Shikha Tyagi (School of Journalism and Mass Communication, AAFI, India)</i>	
Predicting the Unpredictable: A Paradigm Shift in Random Sequence Analysis	259
<i>Akhil Sharma (Joosworks IT Solutions Pvt Ltd, India), Birendra Kumar (AKG college Ghaziabad, India), and Vibha Sharma (GL Bajaj college, India)</i>	
Crime Against Women in India: Statistical Analysis Using Linear Regression	271
<i>Zarin Tasnim Mim (Jain (Deemed-to-be University), India), Rittika Paul (Jain (Deemed-to-be University), India), Mollah MD Foyzal (Jain (Deemed-to-be University), India), Fairuz Nowshin Tohfa (East Delta University), and Shah Abrar Mahi (Chandigarh University, India)</i>	
Analyzing the Impact of Air Quality on UV Index Using Real-Time Weather Data from Major Cities Across the World	278
<i>Parth Middha (Amity University, India), Syed Basim Muftaba Andrabi (Amity University, India), Tanushree Gupta (Amity University, India), and Abhishek Singhal (Amity University, India)</i>	
Risk Analysis of Stablecoins: Exploring Blockchain Integration, Stability Mechanisms, Regulatory Challenges, and Market Impact	284
<i>Shalini Singh (Christ (Deemed to be university), NCR), Shubhanker Yadav (Christ (Deemed to be university), NCR), Anshupriya Tirkey (Christ (Deemed to be university), NCR), Beronica Kullu (Christ (Deemed to be university), NCR), and Kartikeya Singh (Christ (Deemed to be university), NCR)</i>	
Cloud-native Countinous Integration/Continous Deployment (CI/CD) Pipeline	292
<i>Shivansh Kumar (Chandigarh University, Punjab), Neetu Bala (Chandigarh University, Punjab), Arun Prakash Singh (Chandigarh University, Punjab), and Yash Raj (Chandigarh University, Punjab)</i>	
Enhanced Weather Forecasting with Hybrid Model of K Means and DBSCAN	298
<i>Janhvi Wadhwa (Chandigarh University, INDIA), Aman Suthar (Chandigarh University, INDIA), Vidhika Sehwari (Chandigarh University, INDIA), Deepanshi Joon (Chandigarh University, INDIA), and Prabhjot Kaur (Chandigarh University, INDIA)</i>	
PROXY: Personal Revenue Organisation Xpense Yardstick	304
<i>Prerana Singh (B M Institute of Engineering and Technology, India), Sameer Rathi (B M Institute of Engineering and Technology, India), Aditya Pratap Singh (B M Institute of Engineering and Technology, India), Harish Kumar Mittal (B M Institute of Engineering and Technology, India), Sonika Vasesi (B M Institute of Engineering and Technology, India), and Paramjeet Ruhel (B M Institute of Engineering and Technology, India)</i>	

Exploring Various Data Security Methods for Enhancing Security in Cloud Computing	312
<i>Rubi Kadyan (Department of Computer Science Eng. & IT Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat), Sunita Rani (Department of Computer Science Eng. & IT Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat), Vinod Kr. Saroha (Department of Computer Science Eng. & IT Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat), and Sonal Beniwal (Department of Computer Science Eng. & IT Bhagat Phool Singh Mahila Vishwavidyalaya, Sonipat)</i>	

Deep Learning and Neural Networks

Development and Testing of a CNN-Based Smart Web Application Deep Learning for Early Detection of Plant Diseases	319
<i>Premkumar Reddy (Frisco, United States), Jagendra Singh (Bennett University, India), Gopal Singh Rawat (Bennett University, India), Shashikant Shashikant (Babu Banarasi Das University, India), Mohammed I. Habelalmateen (The Islamic university, Iraq), and M. Sree Vani (Department of CSE, BVRIT Hyderabad College Of Engineering For Women, India)</i>	
Machine Learning Approaches for Predictive Channel State Information in MIMO Systems Using LSTM	325
<i>Deepak Upadhyay (Era Hill University, India), Amulya Sharma (Graphic Era deemed to be University, India), Mridul Gupta (Graphic Era deemed to be University, India), Divyansh Devgun (Graphic Era deemed to be University, India), Shobhit Garg (Graphic Era deemed to be University, India), and Abhay Upadhyay (Graphic Era deemed to be University, India)</i>	
Comparative Analysis of Machine Learning and Deep Learning Algorithms for Plant Disease Classification and Detection	331
<i>Harminder Kaur (Maharishi Markandeshwar (Deemed to be University), India), Neeraj Raheja (Maharishi Markandeshwar (Deemed to be University), India), and Amit Kumar Bindal (Maharishi Markandeshwar (Deemed to be University), India)</i>	
Advancing Low Resource Natural Language Processing: Techniques, Applications, and Future Directions	337
<i>Parth Middha (Amity University, India), Harshit Agarwal (Amity University, India), Vaibhav Rajput (Amity University, India), Ayush Thakur (Amity University, India), Sofia Singh (Amity University, India), and Shipra Saraswat (Amity University, India)</i>	
SroX: Accelerating Hidden Weight Creation in Neural Networks via Spectral Relaxation and X-Iteration	342
<i>Harshit Agarwal (Amity University, India), Parth Middha (Amity University, India), Ayush Thakur (Amity University, India), Sofia Singh (Amity University, India), Shipra Saraswat (Amity University, India), and Neha Bhatia (Panipat Institute of Engineering & Technology, India)</i>	
Unveiling the Synergy - The Intersection of Deep Learning and Object identification	348
<i>Harsh Sharma (Chandigarh University, India), Keshav Kumar Soni (Chandigarh University, India), Arin Rai (Chandigarh University, India), Shreya Shree (Chandigarh University, India), Abhinav Sharma (Chandigarh University, India), and Subhroneel Banerjee (Chandigarh University, India)</i>	

Joint Power and Channel Allocation in Fading Channels using Deep Reinforcement Learning .	354
<i>Deepak Upadhyay (Graphic Era Hill University, India), Abhay Upadhyay (Graphic Era Deemed to be University, India), Mridul Gupta (Graphic Era Deemed to be University, India), and Kunj Bihari Sharma (Graphic Era Deemed to be University, India)</i>	
Deep Reinforcement Learning With Graph Neural Networks: An In-Depth Analysis of Algorithms and Applications	360
<i>Sakshi Srivastava (B M Institute of Engineering and Technology, India), Harish Kumar Mittal (B M Institute of Engineering and Technology, India), Sonika Vasesi (B M Institute of Engineering and Technology, India), Paramjeet Ruhel (B M Institute of Engineering and Technology, India), Avdhi Jain (B M Institute of Engineering and Technology, India), and Divya Chauhan (B M Institute of Engineering and Technology, India)</i>	
Flood Prediction using LSTM with Other Deep Learning Architecture	365
<i>Shuryansh Gupta (Chandigarh University, India), Megha Megha (Chandigarh University, India), Narinder Yadav (Chandigarh University, India), Mukesh Arya (Chandigarh University, India), Naman Kumar (Chandigarh University, India), and Neetu Rani (Chandigarh University, India)</i>	
Advancements in Natural Language Processing: BERT and Transformer-Based Models for Text Understanding	372
<i>Sanjay Singla (Chandigarh University, India), Priyanshu Priyanshu (Chandigarh University, India), Ayush Thakur (Chandigarh University, India), Aryan Swami (Chandigarh University, India), Utkarsh Sawarn (Chandigarh University, India), and Priti Singla (Chandigarh University, India)</i>	
Machine Learning-Based Classification of ASD for Improved Diagnostic Accuracy	380
<i>Ishdeep Singla (Chandigarh University, India), Onkesh Onkesh (Chandigarh University, India), Sanjay Singla (Chandigarh University, India), Narinder Yadav (Chandigarh University, India), Priti Singla (Chandigarh University, India), and Jyoti Rani (Chandigarh University, India)</i>	
Refined ANN-Based Framework for Improved Early Breast Cancer Detection	387
<i>Sahil Walia (n/a)</i>	

Digital Transformation, Automation, and Human-Computer Interaction

Implementation of Dynamic Spectrum Access Techniques in Cognitive Radio Networks under Generalized Fading Conditions	394
<i>Deepak Upadhyay (Graphic Era Hill University, India), Kunj Bihari Sharma (Graphic Era Deemed to be University, India), Mridul Gupta (Graphic Era Deemed to be University, India), Shobhit Garg (Graphic Era Deemed to be University, India), Amulya Sharma (Graphic Era Deemed to be University, India), and Divyansh Devgan (Graphic Era Deemed to be University, India)</i>	
Bulls Eye: A Poultry Sector Assistant Mobile Application with Poultry Farm Reliability Check, Farm Search, Product Order, Poultry Disease Help Features	400
<i>Mahfuzulhoq Chowdhury (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh), Shah Alam (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh), and Md Nafiul Hasan Ha-mim (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh)</i>	

Humanitarian: A Social Issue Solving Mobile Application Featuring Fundraising, Prompt Help, Surveying, Ledger Book, and Police Report Services	406
<i>Mahfuzulhoq Chowdhury (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh) and Nura Hadi (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh)</i>	
E-Vigilant: An E-Commerce Assistant Smartphone Application with Customer and Seller Fraud Detection, Seller Identity Check, Legal Help, E-Shopping Features	412
<i>Salman Farsi (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh) and Mahfuzulhoq Chowdhury (CSE Department, Chittagong Univ. of Eng. and Tech., Bangladesh)</i>	
Advanced Segmentation Techniques in Medical Image Classification	418
<i>Sonia Suneja (Chandigarh University, India) and Ashish Kumar (Chandigarh University, India)</i>	
Comparative Study on Spectrum Sensing and Modulation Techniques in Cognitive Radio Network.....	424
<i>Adhyan Ahuja (Birla Institute of Technology and Science, India), Pooja Balhara (Birla Institute of Technology and Science, India), and Rakhee Kulshrestha (Birla Institute of Technology and Science, India)</i>	
Comparison of Affiliate Programs Strategies using Different Platforms	430
<i>Ravi Kumar (COER University, India), Kapil Kumar (COER University, India), Ankit Tomar (Graphic Era Deemed to be University, India), Paras Jain (VIT Bhopal University, India), Lipika Goel (Sridevi Women's Engineering College, India), and Vishan Kumar Gupta (Amity University Punjab, India)</i>	
Navigating the Digital Marketplace A Study of Furniture E-Commerce Platforms	436
<i>Ishani Muckerji (Chandigarh University, India), Er. Narinder Yadav (Chandigarh University, India), Abhishek Budhanian (Chandigarh University, India), Yashika Shrivastava (Chandigarh University, India), Yashasvi Sharma (Chandigarh University, India), and Rishu Raj (Chandigarh University, India)</i>	
Cybersecurity in Digital Transformation: Challenges and Solutions	444
<i>Kapil Saini (Geeta University, India), Parul Sehrawat (Geeta University, India), and Neeraj Neeraj (Geeta University, India)</i>	

Healthcare Technologies and Bioinformatics

Eyecheck Diabscan: A Productive Approach for Few-Shot Excellence in Retinopathy Diagnosis	452
<i>Bhaskar Nuthanakanti (CMR Technical Campus, India), Krishnaveni E (CMR College of Engineering & Technology, India), Jayavanth Rao Sinde (CMR Engineering College, India), Pradeep Reddy Kumbala (CMR Institute of Technology, India), Vinoda Reddy G (CMR Technical Campus, India), and Raji Reddy Avala (CMR Technical Campus, India)</i>	
Uber SoS: A Medical Service Extension of Uber	458
<i>Surendra Kumar Shukla (SVKM'S NMIMS MPSTME, India), Paras Jain (VIT Bhopal University, India), Priyank Pandey (Graphics Era Deemed to be University Dehradun, India), Vidisha Wadhawan (Amity University Punjab, India), Vishan Kumar Gupta (Amity University Punjab, India), and Vinod Raturi (Amity University Punjab, India)</i>	

Healthify Revolution: Machine Learning's Role in Transforming Public Health	465
<i>Sayan Kabiraj (Chandigarh University, Mohali), Bharti Sahu (Chandigarh University, Mohali), Priyanshu Chaudhary (Chandigarh University, Mohali), Sunny Kumar (Chandigarh University, Mohali), Abdul Samad Khan (Chandigarh University, Mohali), and Shubh Srivastava (Chandigarh University, Mohali)</i>	
A Random Forest Framework for Predicting Cardiovascular Disease in Diverse Populations ...	472
<i>Parvez Rahi (Chandigarh University Mohali Punjab, India), Sandeep Singh Kang (Chandigarh University Mohali Punjab, India), Ajay Pal Singh (Chandigarh University Mohali Punjab, India), and Inderjeet Singh (Chandigarh University Mohali Punjab, India)</i>	
Boosting Tuberculosis Classification Accuracy with Polynomial Features and Random Forests	479
<i>Parvez Rahi (Chandigarh University, India), Inderjeet Singh (Chandigarh University, India), Anushka Kanojia (Chandigarh University, India), Ankit Kumar (Chandigarh University, India), and Tarun Baliyan (Chandigarh University, India)</i>	
RNN-Driven Prognosis of Heart Disease Based on Health Parameters	486
<i>Parvez Rahi (Chandigarh University Mohali Punjab, India), Inderjeet Singh (Chandigarh University Mohali Punjab, India), Ajay Pal Singh (Chandigarh University Mohali Punjab, India), and Alok Kumar (Chandigarh University Mohali Punjab, India)</i>	
A Two-Level Framework for CXR Image Enhancement with Gradient Assisted Guided based CLAHE	493
<i>Kampa Lavanya (Acharya Nagarjuna University, India), Dhamaraju Sai Satish (Indian Servers private limited, India), Y.Madhavi Reddy (JNTUH, India), and K. Jhansi Rani (JNTUK, India)</i>	
Deeptumornet: Brain Tumor Classification in Medical Imaging	500
<i>Mehak Sharma (Chandigarh University, India), Krish Monga (Chandigarh University, India), Ripandeep Kaur (Chandigarh University, India), and Sahil Bhardwaj (Chandigarh University, India)</i>	
Deep Learning for Dermatological Diagnostics: A Comprehensive Study On Skin Disease Classification Using Resnet50	506
<i>Priyanka Devi (Chandigarh University, India), Deepanshu Gupta (Chandigarh University, India), Adarsh Thakur (Chandigarh University, India), Dharendra Kumar (Chandigarh University, India), Aditya Kumar (Chandigarh University, India), and Bhumi Budhiraja (Chandigarh University, India)</i>	
Balancing Security and Privacy with Data Usefulness and Efficiency in Wireless Sensor Networks	512
<i>Narinder Yadav (Chandigarh University, Punjab), Aditya Sharma (Chandigarh University, Punjab), Kushagra Bharti (Chandigarh University, Punjab), Krish Jaiswal (Chandigarh University, Punjab), Ayush Jhalani (Chandigarh University, Punjab), and Santosh Kumar (Chandigarh University, Punjab)</i>	
Disease Detection in C4 Plants Using Machine Learning Approaches	519
<i>Souravdeep Singh (Lovely Professional University, India), Geeta Sharma (Lovely Professional University, India), Ram Kumar (VIT Bhopal University, India), and Adesh Kumar (Lovely Professional University, India)</i>	

Interdisciplinary Applications of AI and Machine Learning

Leveraging Speech Driven Patterns Multimodal Machine Learning Framework For Accurate Early Stage Parkinson's Disease Prediction - A Survey	525
<i>V. S. Karwande (Sandip University, India), Umesh B. Pawar (Sandip University, India), and Omkar Pattnaik (Sandip University, India)</i>	
Evaluating Deep Learning Architectures for Lung Disease Classification: A Study of VDSNet, State-of-the-Art Models	533
<i>Tanu Dhiman (Chandigarh University, India) and Puneet Kumar (Chandigarh University, India)</i>	
Enhancing Power System Stability: A Study on Damping Torsional Oscillations with CSA-Based STATCOM Control	540
<i>Sangeeta Bamba (Electrical Engineering Department, Deenbandhu Chhotu Ram University of Science and Technology, India) and Sushil Kumar Gupta (Electrical Engineering Department, Deenbandhu Chhotu Ram University of Science and Technology, India)</i>	
Workplace Wingman: Enhancing Indoor Autonomy for Efficient Workplace Operations	546
<i>Komal Potdar (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Yash Mahajan (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Ajinkya Thakare (Department of Computer Engineering, Vishwakarma Institute of Technology, India), Ruturaj Amrutkar (Department of Computer Engineering, Vishwakarma Institute of Technology, India), and Pushkar Joglekar (Department of Computer Engineering, Vishwakarma Institute of Technology, India)</i>	
Predictive Analytics for Crop Management: Leveraging Machine Learning for Yield Analysis ..	558
<i>Inderjeet Singh (Chandigarh University, India), Muskan Sharma (Chandigarh University, India), and Yashs Tiwari (Department of Computer Science, IET, DSMNRU, India)</i>	
AI-Driven Crop Yield Prediction	564
<i>Nitin Singh (Chandigarh University, India), Shivansh Kandhoua (Chandigarh University, India), and Payal Thakur (Chandigarh University, India)</i>	
Comparative Investigations on Potential Factors in View of Electric Mobility Espousal in Indian Context	572
<i>Hemant Kumar Upadhyay (Amity University Haryana), Rajesh Arora (Amity University Haryana, India), Sandeep Phogat (Amity University Haryana, India), and Ravi Kant Gupta (Manipal University, India)</i>	
Automated Diagnostic Technologies: Enhancing Clinical Efficiency Through Robotics	578
<i>Parneet Kaur (Chandigarh University, India) and Renu Mahajan (Chandigarh University, India)</i>	
Enhancing Hindi Handwriting Recognition Using Neural Network	584
<i>Narinder Yadav (Chandigarh University, India), Gagandeep Gagandeep (Chandigarh University, India), Mayank Kumar (Chandigarh University, India), Shivanshu Yadav (Chandigarh University, India), Ronit Ronit (Chandigarh University, India), and Megha Megha (Chandigarh University, India)</i>	
Adoption of Business Intelligence by MSMEs: Overcoming Challenges in Uncertain Times	591
<i>Vikram Jit Singh (Indian Institute of Foreign Trade, India) and Ashim Raj Singla (Indian Institute of Foreign Trade, India)</i>	

Innovations In Agri-Tech: A Review of Artificial Intelligence Applications and Challenges In Modern Agriculture	599
<i>Rupanshi Agarwal (Invertis University, India), Isha Bhardwaj (Kothiwal Institute of Technology and Professional Studeis, India), Ashish Kumar Sharma (Invertis University, India), Akash Sanghi (Invertis University, India), and Gaurav Agarwal (Invertis University, India)</i>	
AI-Driven Prognosis for Genetic Disorder Outcomes	605
<i>Harsh Sharma (Chandigarh University, India), Nikhil Kumar (Chandigarh University, India), Bharat Bhushan (Chandigarh University, India), Akshat Sharma (Chandigarh University, India), and Sagar Sharma (Chandigarh University, India)</i>	

Internet of Things (IoT) and Smart Technologies

Automated Network Vulnerability Detection in IoT: Lightweight IDS Approaches for Enhanced Security	612
<i>Amol B. Gadewar (SKNCOE Vadgaon (Bk.), Pune), Ritesh V. Patil (PDEA'S College of Engineering Manjari (Bk.), Pune), Surendra A. Mahajan (PVGCOET & GKPIOM, Pune), and Lalit V. Patil (SKNCOE Vadgaon (Bk), Pune)</i>	
Real-Time Anomaly Detection and Threat Mitigation in IoT Networks Using Convolutional Neural Networks (CNNs) for Enhanced Security	619
<i>Jagendra Singh (Bennett University, India), Jabir Ali (Bennett University, India), Preeti Sharma (Department of CSE (DS), Raj Kumar Goel Institute of Technology, India), Vinish Kumar (Department of CSE (AI-ML), Raj Kumar Goel Institute of Technology, India), Meenakshi Sharma (Department of Electronics & Communication Engineering, Inderprastha Engineering College, India), and Ramendra Singh (Department of Computer Science and Engineering (IoT), Raj Kumar Goel Institute of Technology, India)</i>	
Enhancing Privacy in IoT Networks through Advanced Machine Learning Techniques	625
<i>Ajatray Swagat Bhuyan (Chandigarh University, India)</i>	
Securing Internet of Things Devices in the Cloud – a Literature Review	631
<i>Pavandeep Kaur (Chandigarh University, India), Ridhima Handa (Chandigarh University, India), and Mayank Kanaujia (Chandigarh University, India)</i>	
A Hybrid Framework for IDS in IOT Data with RLSTM and GWO	637
<i>Ksrk Sarma (JNTUH, India), Y.Sowmya Reddy (JNTUH, India), U Surya Kameswari (Acharya Nagarjuna University, India), and Vassey Nagaraju (Andhra University, India)</i>	
Design and Optimization of High-Performance Health Monitoring Systems Using Advanced Sensor Networks	644
<i>Heena Mehta (Baba mastnath university, India) and Mukesh Singla (Baba mastnath university, India)</i>	
An Innovative Road and Traffic Safety Management System Using IoT	651
<i>Dileep Reddy Bolla (Department of CSE, Nitte Meenashi Institute of Technology, India), Aman Raj (Department of CSE, Nitte Meenashi Institute of Technology, India), Harsh Suhane (Department of CSE, Nitte Meenashi Institute of Technology, India), Mohit Ranjan (Department of CSE, Nitte Meenashi Institute of Technology, India), and Samrath Chavhan (Department of CSE, Nitte Meenakshi Institute of Technology, India)</i>	

Pioneering Transportation with Next-Gen Safety and Tracking Innovations	656
<i>Dileep Reddy Bolla (Department of CSE, Nitte Meenakshi Institute of Technology, India), Aditya Matur (Department of CSE, Nitte Meenakshi Institute of Technology, India), Manoj Krishna Naik (Department of CSE, Nitte Meenakshi Institute of Technology, India), Sagar Karki (Department of CSE, Nitte Meenakshi Institute of Technology, India), and Shivashankar Hatkar (Department of CSE, Nitte Meenakshi Institute of Technology, India)</i>	
Enhancing Urban Mobility: A Smart Parking System Using IoT and Machine Learning	661
<i>Narinder Yadav (Chandigarh University, India), Sandeep Singh Kang (Chandigarh University, India), Rajneesh Verma (Chandigarh University, India), Varun Garg (Chandigarh University, India), and Ishdeep Singla (Chandigarh University, India)</i>	
Automatic Waste Segregation Using Sensors and Bolts	667
<i>Janhvi Wadhwa (Chandigarh University, India), Aman Suthar (Chandigarh University, India), Rashprit Kaur (Chandigarh University, India), Deepanshi Joon (Chandigarh University, India), and Prabhjot Kaur (Chandigarh University, India)</i>	
User-Friendly AIoT Enabled Walnut Recommendation System (UAWCRS): Concept and Architecture	673
<i>Khalil Ahmed (Lovely Professional University, India), Mithilesh Kumar Dubey (Lovely Professional University, India), Devendra Kumar Pandey (Lovely Professional University, India), and Kajal Verma (Lovely Professional University, India)</i>	
Enhancing Fog Computing Performance with SqueezeNet Approach for IoT Applications	681
<i>Ramesh Kait (Kurukshetra University, India), Lokesh Lokesh (Kurukshetra University, India), Tajinder Kumar (JMIETI, India), and Ashish Girdhar (Kurukshetra University, India)</i>	

Predictive Analytics and Data Mining

Machine Learning Unveils OTT Preferences: A Study of Uttarakhand's Middle-Aged Audience	689
<i>Vidushi Negi (Amity University, India), Himani Binjola (Graphic Era Hill University, India), Vivek Chamoli (Graphic Era Hill University, India), Shikha Tyagi (School of Journalism and Mass Communication, AAFT, India), Shweta Bajaj (Graphic Era (Deemed to be University), India), and Rajesh Tiwari (Graphic Era (Deemed to be University), India)</i>	
Predictive Analysis of Big Five Traits in Determining Entrepreneurial Intention Using Machine Learning Algorithms	693
<i>Roohi Naaz (Graphic era (deemed to be university), India), Riya Sharma (Graphic era deemed to be university, India), Bharti Ramtiyal Soni (Graphic Era (deemed to be university), India), Shipra Agarwal (Graphic era(deemed to be university), India), and Rajesh Tiwari (Graphic (era deemed to be university), India)</i>	

Prediction of Women Entrepreneurial Intention Through Educational Support Using Machine Learning Algorithms	700
<i>Roohi Naaz (Department of Commerce, Graphic era (deemed to be university), India), Riya Sharma (Department of Commerce, Graphic era (deemed to be university), India), Bharti Ramtiyal Soni (Department of Management studies, Graphic Era (deemed to be university), India), Shipra Agarwal (Department of Commerce, Graphic era (deemed to be university), India), and Rajesh Tiwari (Department of Management studies, Graphic Era (deemed to be university), India)</i>	
A Comprehensive Evaluation of Radial Basis Function Networks for Feature Selection and Classification	706
<i>Jagendra Singh (Bennett University, India), Nidhi Nidhi (Bennett University, India), Preeti Sharma (Department of CSE (DS), Raj Kumar Goel Institute of Technology, India), Vinish Kumar (Department of CSE (AI-ML), Raj Kumar Goel Institute of Technology, India), Meenakshi Sharma (Department of Electronics & Communication Engineering, Inderprastha Engineering College, India), and Ramendra Singh (Department of Computer Science and Engineering (IoT), Raj Kumar Goel Institute of Technology, India)</i>	
Potato Leaf Disease Detection Method is based on the Support Vector Machines	711
<i>Animesh Srivastava (Graphic Era Hill University, Dehradun), Bhupender Singh Rawat (COER University, Roorkee), Vikash Sawan (GLA University, Uttar Pradesh), Vishal Vishal (Lovely Professional University, Punjab), and Shiv Ashish Dhondiyal (Graphic Era (Deemed to be University), Dehradun)</i>	
Prediction on Happiness Index of Employees using Cognitivism	716
<i>Kiranmayee B.V (VNR VJIET, India), Deepak Sukheeja (VNR VJIET, India), and Anusha Nallanagula (VNR VJIET, India)</i>	
Optimizing Edge Prediction in Traveling Salesman Problems Using Ensemble Learning and Hyperparameter Tuning	726
<i>Shafalii Sharma (Chandigarh University, India), Goutam Kumar (Chandigarh University, India), Gurveer Singh (Chandigarh University, India), Vaibhav Mahajan (Chandigarh University, India), and Kshitiz Thakur (Chandigarh University, India)</i>	
Machine Learning and Artificial Intelligence in Cybersecurity: Innovations and Challenges	732
<i>Vinayak Khatri (Invertis University, India), Gaurav Agarwal (Invertis University, India), Amit Kumar Gupta (KIET Group of Institution, India), and Akash Sanghi (Invertis University, India)</i>	
Applying Bayesian Networks to Predict and Understand the Student Academic Performance ..	738
<i>Franklin Parrales-Bravo (Universidad de Guayaquil, Ecuador), Rosangela Caicedo-Quiroz (Universidad Bolivariana del Ecuador, Ecuador), Julio Barzola-Monteses (Universidad Bolivariana del Ecuador, Ecuador), and Lorenzo Cevallos-Torres (Universidad de Guayaquil, Ecuador)</i>	
Artificial Harmony: Music Mashup using AI	744
<i>Rishabh Ta (PES University, India), Ramit Salunke (PES University, India), Dharneesh Kumar (PES University, India), and Jayashree R (PES University, India)</i>	
Machine Learning Model to Predict the Pet Adoption Likelihood	749
<i>Bharti Thakur (Shoolini University, India), Neeraj Chauhan (Shoolini University, India), and Priya Pundir (Shoolini University, India)</i>	

Train Waitlisted Ticket Confirmation Prediction Using Machine Learning	756
<i>Ruchi Ruchi (Chandigarh University, India), Fardin Khan (Chandigarh University, India), Hitesh Kumar (Chandigarh University, India), Kamalveer Singh (Chandigarh University, India), and Sachin Yadav (Chandigarh University, India)</i>	

Revolutionizing Cybersecurity, Computing, and Legal Systems Through AI

Evaluating Machine Learning Approaches for DDoS Attack Detection Using CIC-DDoS2019 ...	762
<i>Divya Kapil (Graphic Era Deemed to be University, India), Varsha Mittal (Graphic Era Deemed to be University, India), and DurgaPrasad Gangodkar (Graphic Era Deemed to be University, India)</i>	
Improving Software Engineering Practices: AI-Driven Adoption of Design Patterns	768
<i>Vinay Supekar (MIT WPU, India) and Rajeshree Khande (MIT WPU, India)</i>	
Refining Intrusion Detection Capabilities through Combined Algorithmic Classification Techniques	775
<i>Chandini Lekkalapudi (JAIN (Deemed-to-be-University), India), Niranjana Holla V P (Bosch Global Software (BGSW), India), Jagannathan S (Rajarajeswari College of Engineering, India), Vasanthakumar C (Sri Eshwar College of Engineering, India), and Suriya Prakash J (JAIN (Deemed-to-be-University), India)</i>	
Enhancing the Security by Analyzing the Behavior of Multiple Classification Algorithms with Dimensionality Reduction to Obtain Better Accuracy	783
<i>Sai Nandini (JAIN (Deemed-to-be-University), India), Sreenivasa Murthy V (Rajarajeswari College of Engineering, India), Prakasha P K (Rajarajeswari College of Engineering, India), Prakash U (Sri Eshwar College of Engineering, India), and Suriya Prakash J (JAIN (Deemed-to-be-University), India)</i>	
Enhance Intrusion Detection by Analyzing the Behavior of Labeled and Unlabeled Classification to Obtain Better Accuracy	791
<i>Suriya Prakash J (JAIN (Deemed-to-be-University), India), Srinidhi N (Manipal Institute of Technology, India), Latha A (Sri Krishna Institute of Technology, Visvesvaraya Technological University, India), Chaitra U (KSIT, India), and Kiran S (Nitte Meenakshi Institute of Technology, India)</i>	
Deep Fake Detection Using HOG-Based Facial Landmarks and Illumination Artifacts	798
<i>Preeti Rana (Maharishi Markandeshwar (Deemed to be University), India) and Sandhya Bansal (Maharishi Markandeshwar (Deemed to be University), India)</i>	
Voice Spoofing in the Era of Deepfakes: Machine Learning Challenges and Solutions	804
<i>Rekha Rani (Maharshi Dayanand University, India), Bal Kishan (Maharshi Dayanand University, India), and Rahul Rahul (St. Andrews Institute of Technology & Management, Gurugram)</i>	
Law Guardian – Modernizing Crime Reporting and Judicial Efficiency	810
<i>Rashmi Ashtagi (Vishwakarma Institute of Technology, India), Sejal Jadhav (Vishwakarma Institute of Technology, India), Diya Shaikh (Vishwakarma Institute of Technology, India), Muaz Shaikh (Vishwakarma Institute of Technology, India), and Shirin Shaikh (Vishwakarma Institute of Technology, India)</i>	

Gradient Scaling and Segmented SoftMax Regression for Federated Learning: A Novel Approach for Attack Detection in Industrial Internet of Things (IIOT) Networks	814
<i>Rupali Ramdas Shevale (Sandip University, India) and Monika Deshmukh (Sandip University, India)</i>	
Comprehensive Review of IoT Attack Detection Using Machine Learning and Deep Learning Techniques	827
<i>Mohammad Zahid (Jamia Millia Islamia, India) and Taran Singh Bharati (Jamia Millia Islamia, India)</i>	
Comparative Analysis of Hybrid and Deep Learning Models for Vehicle Tracking	835
<i>Seema Rani (Maharshi dayanand university, India) and Sanddep Dalal (Maharshi Dayanand University, India)</i>	

Smart AI Solutions for Sustainable Health, Farming, and Business Development

Automated AI-Driven Detection of Brain Infarct and Hemorrhage via CT Scan and MRI Imaging ..	842
<i>Chitra Bhole (K.J. Somaiya Institute of Technology, India), Apurva Mhamane (K.J. Somaiya Institute of Technology, India), Radhika Pawar (K.J. Somaiya Institute of Technology, India), Akshata Machagar (K.J. Somaiya Institute of Technology, India), and Chandrakant Shetty (K.J. Somaiya Medical College & Research Centre, India)</i>	
Elevating Cystic Fibrosis Detection in Lungs Using HRCT Images with a Cutting-Edge CNN-Based Approach	850
<i>Amrutha Sriya Ganjam (Stanley College of Engineering and Technology for Women, India), Kishor Kumar Reddy C (Stanley College of Engineering and Technology for Women, India), Radhika D (Stanley College of Engineering and Technology for Women, India), Karthik Ganjam (University of Edinburgh, UK), Monika Singh.T (Stanley College of Engineering and Technology for Women, India), and Keerthi Sai Akuthota (Stanley College of Engineering and Technology for Women, India)</i>	
An Automated System Pre-Trained to Identify Cardiovascular Disorders from ECG Pictures ...	856
<i>Bhaskar Nuthanakanti (CMR Technical Campus, India), Vivekanand Aelgani (CMR College of Engineering & Technology, India), Sheo Kumar (CMR Engineering College, India), Sunitha Devi Bigul (CMR Institute of Technology, India), Naresh Kumar Voruganti (CMR Technical Campus, India), and Divya G (CMR Technical Campus, India)</i>	
Correlating ROI, CPC, and Acquisition Costs Across Channels for Insightful Advertising	862
<i>Khizar Mohamed Zubair Sait (Chaitanya Bharathi Institute of Technology, India), Gatla Vijayendher (Chaitanya Bharathi Institute of Technology, India), K. Sai Karthikeya (Chaitanya Bharathi Institute of Technology, India), Satya Kiranmai Tadepalli (Chaitanya Bharathi Institute of Technology, India), and Shobarani Salvadi (Chaitanya Bharathi Institute of Technology, India)</i>	
AI in Medicine: CNN Techniques for Pneumonia and Pandemic Pathogen Identification	868
<i>Ganji Ramanjaiah (R V R & J C College of Engineering, India), Nagendar Yamsani (SR University, India), Smritilekha Das (Koneru Lakshmaiah Education Foundation, India), Balajee Maram (SR University, India), Ananda Babu Rudrubati (Kallam Haranadhareddy Institute of Technology, India), and Katakam Venkateswara Rao (Koneru lakshmaiah Education Foundation, India)</i>	

MedBot: A Novel Sequential Pipeline for Context Recognition based on SciSpacy and Med7 Entity Recognizer	875
<i>Tushar Agarwal (The Galaxy Education System, India), Bhavesh Singh (Maharaja Surajmal Institute of Technology, GGSIPU, New Delhi), and Aarti Chugh (IIML University, Haryana)</i>	
Rainfall Prediction using Novel Approach for Enhancing Crop Yield	880
<i>Visweswararao Seelam (Dept of CSE, PACE Institute of Technology and Sciences), Sriharsha Vikruthi (Dept of CSE, B V Raju Institute of Technology, India), Naresh Kumar Bhagavatham (Dept of CSE, Vignana bharathi Institute of Technology, India), Nagendrudu P V V S D (Aditya University, Surampalem), SrinivasaRao Goda (KL University, Andhra Pradesh), and Ayyappa Chakravarthi M (Dept of CSE-Data Science, KKR & KSR Institute of Technology & Sciences, Andhra Pradesh)</i>	
A Comparison of Machine Learning Technologies for Soil Analysis in Smart Agriculture: A Comprehensive Review	885
<i>Preety Chaudhary (Maharshi Dayanand University, India), Preeti Gulia (Maharshi Dayanand University, India), and Nasib Singh Gill (Maharshi Dayanand University, India)</i>	
Enhanced Image Classification with Integrating DenseNet121 with Mixup Augmentation and Attention Mechanisms for Knee OA	889
<i>Revathi S A (RV College of Engineering, India) and B Sathish Babu (RV College of Engineering, India)</i>	
Modified Grey Wolf Optimization based Feature Selection for Tomato Plant Disease Classification	895
<i>Chetan Singh Negi (College of Technology, GBPUAT, India), H. L. Mandoria (College of Technology, GBPUAT Pantnagar, India), and Sunita Jalal (College of Technology, GBPUAT Pantnagar, India)</i>	
Fusing Tradition with Technology through Machine Learning and Blockchain for Enhanced Food Quality and Heritage Preservation in Himachali Dham	900
<i>Satish Guleria (MM (Deemed to be University), Mullana-Ambala), Suresh Chauhan (MM (Deemed to be University), Mullana-Ambala), and Ishan Bakshi (GNA University, Phagwara)</i>	
Optimization Accuracy of MRI Brain Image based Tumor Detection using Deep Learning LSTM Technique	909
<i>Aarti Chugh (IILM University, India), Ranjeet Kumar Yadav (Shree Guru Gobind Singh Tricentenary University, India), and Tushar Agarwal (The Galaxy Education System, India)</i>	

Author Index