# 2024 4th International Conference on Innovative Practices in Technology and Management (ICIPTM 2024)

## Noida, India
## 21-23 February 2024

## Pages 1-729

**IEEE Catalog Number:** CFP241AC-POD
**ISBN:** 979-8-3503-0776-4

**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: CFP241AC-POD
ISBN (Print-On-Demand): 979-8-3503-0776-4
ISBN (Online): 979-8-3503-0775-7

**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
Web: www.proceedings.com

# TABLE OF CONTENTS

Engineering High-Efficiency CZTSSe Solar Cells: Investigating the Role of Absorption Layer Thickness and Doping Density ..... 1
*Aniket Verma, Nikhil Shrivastav, Jaya Madan*

Optimal Controller Design for Load Frequency Control of Two Area Power System ..... 4
*Sumit Kumar Pandey, Mohammed Haddad*

Elliptical Slotted Patch Antenna for Wi-Fi, WLAN Applications ..... 10
*Vinita Mathur, Parul Tyagi, Ashish Kulshrestha, Mangilal, Devender, Rakesh Kardam*

Mediating Role of Self-Perceived Mental Health in Linking the Work-Life Balance with Job Satisfaction ..... 15
*Rupali Arora, Kavita Kumari*

Using Deep Learning Algorithms for Accurate Diagnosis and Outbreak Prediction of Monkeypox ..... 20
*Kamal Arora, Merry Saxena, Ashok Kumar Sahoo, Abhishek Maurya, Pradeepta Kumar Sarangi, Monica Dutta*

Influences of Efficiency on Shareholder Activism Using ROA as a Moderator? ..... 25
*Prashant Barge, Bhakti Agarwal, Shailesh Rastogi, Soma Sharma, Sangeeta Paliwal, Rahul Sharma*

Unveiling the Potential: DJ-2D/3D Perovskite Materials for Next-Generation Solar Cells ..... 31
*Aniket Verma, Nikhil Shrivastav, Jaya Madan*

Impact of ESG on the Dividend of the Indian Banks. Used Non-Performing Assets as Moderator ..... 35
*Geetanjali Pinto, Prashant Barge, Shailesh Rastogi, Bhakti Agarwal*

Cloud-Based IoT Solution for Enhanced Poultry Farm Management ..... 40
*M Venkata Sai Prasad, A Sumalatha, K Sudha Rani, Ch Meenakshi, M Nicy, D Charan Babu*

MBAMCA : A Mobile Business Architecture for M-Commerce Application's Performance in Cloud Computing Environment ..... 45
*Sadaf Yasmin, Swati Mishra, Asharul Islam, Rashid Hussain*

Smart Technology in Digital Payments: Transforming the Financial Landscape of India ..... 51
*Adesh Doifode, Trupti Bhosale, Ardhendu Shekhar Singh, Deepa Pillai*

Analysis of Effects on Solar Energy Generation Due to Mountain Shadow on Sikkim Manipal Institute of Technology, Sikkim Using Shadowmap 3D GIS Mapping Tool ..... 55
*Bijay Rai, Rajshree Trivedi*

Proactive Network Optimization Using Deep Learning in Predicting IoT Traffic Dynamics ..... 61
*S. Anu Priya, Niyati Bhat, B. Rajesh Kanna, S. Rajalakshmi, R. Beaulah Jeyavathana, Srimathi S*

Reimagining Point-Of-Care Ultrasound with Convolutional Neural Networks and Cloud Computing for Healthcare Transformation ..... 67
*B. Chitradevi, Porandla Srinivas, A. Edwin Raj, V. Prasanna Srinivasan, M. Mythili, M. Muthulekshmi*

Bluetooth® Mesh Device Authentication & Secure Network Commissioning ..... 73
*Kamaldeep Bansal*

Design and Performance Analysis of Wavelength Conversion Based on Four Wave Mixing in SOA for All Optical WDM/ DWDM Network ..... 79
*Manoj Kumar Dutta, Watilekha Das*

GUI Based Modeling and Simulation of Maximal Calcium Ion Bifurcation on Neuron Response and Its Applications ..... 85
*Taslima Ahmed, Zaiba Ishrat, Satvik Vats, Sandhya Bharadwaj, Hitendra Singh*

An Examination of the Trends and Effects of Climate Change Using LST and Other Indices ..... 90
*Unnati A. Patel, Sanskruti Patel, Jay Nanavati, Atul Patel*

Cloud-Based Smart Sewage Management System for Efficient Wastewater Treatment ..... 96
*V. Dhayalan, Ramakrishnan Raman, N. Kalaivani, Ankit Shrirvastava, G. Rajasekar, Thamizhamuthu R*

A Systematic Review of Fetal Cardiac Abnormality with Future Directions ..... 101
*Divya K, Shirly Edward. A, D. Anto Sahaya Dhas*

Encryption and Decryption of Messages Using QR Decomposition ..... 107
*Aparna Ashok Kumar, K. N Meera, Said Broumi*

Proximity Precision: Unveiling Consumer Behavior in Marketing's Close Quarters ..... 112
*Sandeep Prabhu, P Ashok, Armin Bodhanwala, Abhijit Chirputkar*

Learning Resurgence: Unveiling Post-Pandemic Consumer Insights in Indian Government-Backed Educational Technology Platforms ..... 118
*Sandeep Prabhu, P Ashok, Nishant Shekhar, Abhijit Chirputkar*

Virtual Marketplace Dynamics: Understanding Consumer Behavior on Business-To-Consumer Electronic-Commerce Platforms ..... 123
*Sandeep Prabhu, P Ashok, Tushar Kanse, Giri Hallur*

Stitching Data Threads: Impact of Artificial Intelligence on Fashion Evolution ..... 129
*Sandeep Prabhu, P Ashok, Rutuja Nandanwar, Giri Hallur*

Cyber Resilience: Safeguarding India's Markets in the Post-Pandemic Cyber Landscape ..... 135
*Sandeep Prabhu, P Ashok, Abhishek Patil, Giri Hallur*

Artificial Intelligence Powered Paradigm Shift: Revolutionizing Digital Marketing ..... 140
*Bhavesh Patil, P Ashok, Abhijit Chirputkar*

Design and Fabrication of Contactless Clutch with Braking and Traction Control System Using Electromagnetic Coupling ..... 146
*Kanagaraj Venusamy, P Ashok, Karthick D, D Nirmala, Madhan K, Harishchander Anandaram*

AI-Driven Agronomy: Enhancing Crop Yield and Market Profits ..... 150
*Kona Mourya, Thota Bhuvana Chandra, N Abhinay Reddy, Aiswarya S Kumar*

A Hybrid Approach for Medical Image Fusion Using SVD and PCA ..... 156
*Kusuma J, K. N. Meera*

Enhanced Breast Tumor Area Segmentation with Berkeley Wavelet Transformations ..... 161
*Anu S S, Joseph Zacharias*

Book Recommendation System Using R Programming - A Comparative Study. ..... 166
*Sandhiya. B, K. N. Meera, Said Broumi*

Beats and Bytes: Decoding Song's Success Patterns Using Machine Learning ..... 172
*Gauri Tomar, Sanya Bansal, Devendra K. Tayal, Hunny Gaur*

Energy Aware Fog-Enabled Green IoT Networks ..... 178
*Richa, Deepika Kurkreja*

Traffic Signal Based on Real Time Helmet Detection Using AI ..... 184
*Suyash Garad, Shivam Dasgude, Samrudhi Mutke, Priyanka Patil, Savita Jadhav*

Comparative Analysis of Sensor Configurations for Blood Flow Predictions Via Physics-Informed Neural Networks ..... 191
*Yagyadutt Sharma, Aryan Tyagi, Gaurav Kumar, Raj Kumar Singh*

Effect of Leading Edge Tubercles on Vortex Dynamics of Periodically Pitching Swept Wings ..... 197
*Paras Singh, Ananay Joshi, Anubhav Dhyani, Gaurav Kumar, Raj Kumar Singh*

Wireless Sensor Network Based Integrated LEACH Protocol with YOLO and Feed-Forward Resnet for Detecting Real Time Forest Fire to Promote Environmental Sustainability ..... 203
*Sujata Negi Thakur, Anurag Sinha, Mansi Sikarwar, Biresh Kumar, Kapil Kumar Bhardwaj, Tushar Raj, Roumo Kundu, Ahmed Alkhayyat*

A Review on Uncertainty Modelling Approaches for Stochastic Optimization in Power System ..... 209
*Sunil Kumar Goyal, Gaurav Gangil, Amit Saraswat*

Upright Sitting Posture Detector Based on Inertial Measurement Unit for Prolonged Desk Workers ..... 215
*Manikandan Pulavendran, Sharmila Nageswaran*

Visual Narratives Unveiled: Comic Genre Classification Through CNN-SVM Fusion ..... 221
*Rishu, Vikrant Sharma, Vinay Kukreja*

Assessing the Web-Based Learning Behavior of Indian Students: A Study Utilizing the Technology Acceptance and Adoption Model ..... 226
*Preeti Sharma, Vikas Sharma, Sanjay Diddee*

Comparison Between PSD, FFT& Wavelet Transform Methods for Classification of Electromyography (EMG) Signals ..... 232
*Nitin Mishra, Abhishek Gupta, Om Asati, Nikhil Kushwaha, Vijay Kumar Gupta, Prabin Kumar Padhy*

FaceForge: Sculpting Realistic Faces from Detailed Textual Prompts ..... 236
*Umang Thakur, Raj Kalantri, J. Selvin Paul Peter, Priya Esther B*

Breast Cancer Categories, Analysis, Detection: Systematic Review for Histopathological Images ..... 241
*Komal S. Gandle, D. B. Kshirsagar*

Doodle Bot: An Advanced Robot to Draw Complex Geometrical Shapes ..... 247
*Rajratna A. Naranje, Kalyan J. Kale, Pranav Kumar P. Chavan, Omkar A. Shirke, Kiran N. Wakchaure, Naveen Kumar*

Comparative Study of Electric Vehicles: Regenerative Braking System Versus Non-Regenerative Braking Systems ..... 252
*Mohini Gunjal, Lini Mathew, Shimi Reji*

Crisis Prevention on Wheels: IoT-Powered Vehicle Accident Detection and Control System ..... 258
*Pratik Shinde, Chaitanya Bhor, Dhanashree Kunte, Pratik Ahire, Naseem. Y. Siddiqui*

Analysis of Bus Pass System Using Internet of Things with Emerging Technologies ..... 264
*Adhav Viraj Vikram, Hon Akanksha Dwarkanath, Dhage Yash Pramod, Yogesh S Deshmukh*

Analysis on Machine Learning-Based Early Breast Cancer Detection ..... 268
*Dipali Ghadge, Shrutik Hon, Tushar Saraf, Tejas Wagh, Abhishek Tambe, Y. S. Deshmukh*

Competency: A Qualitative Review Paper ..... 273
*Shikha Sahai, Ashutosh Nigam, Rajiv Sindwani*

Revolutionizing Safety: An Arduino-IoT System for Accident Prevention Based on Innovative Practices ..... 278
*Onkar Ghige, P. William*

Big Data and the Internet of Things as Enablers for Business Digital Transformation Efforts ..... 284
*Gomathi. B, Abbinaya Reddy Jannepally, Siddharth Ghansela, R Sujatha, Amit Kumar Kashyap, Vidhya*

Deep Learning Projections for High-Performance Concrete Strength Forecasting ..... 290
*Rupesh Kumar Tipu, Owais Ahmad Shah, Satvik Vats, Sujata Arora*

The Impact of Gamification Across Different Educational Contexts ..... 294
*Devanshu Sawarkar, Pratham Agrawal, Rohit Kumar Mandal, Latika Pinjarkar, Poorva Agrawal, Gagandeep Kaur*

Comparative Study of Object Detection Techniques with Deep Convolutional Neural Networks ..... 301
*Omkar Khadakkar, Piyush Khushalani, Nitin Malik, Harsh Shivankar, Isha Jaiswal, Jagdish Chandra Patni, Nilesh Shelke*

An Empirical Analysis of Cloud Platforms for High Performance Computing ..... 305
*Atharva Kale, Latika Pinjarkar, Muktinath Vishwakarma, Poorva Agrawal, Gagandeep Kaur, Rajesh Tiwari*

Cloud-Driven Precision Rehabilitation: A Data Analytics Approach for Post-Stroke Recovery Enhancement ..... 311
*Manika Kamthan, Ramakrishnan Raman*

Enhancing Concrete Properties Through the Integration of Recycled Coarse Aggregate: A Machine Learning Approach for Sustainable Construction ..... 316
*Rupesh Kumar Tipu, Owais Ahmad Shah, Satvik Vats, Shardha Purohit*

Revolutionizing Stock Market Intelligence: A Deep Dive into Machine Learning for it Sector Price Predictions ..... 321
*Parth Mishra, Gaurav Parashar, Vaibhav Chaudhary, Ishant Sehgal*

Ready-Made Solution to Face 5th Industrial Revolution- Acquiring 4Cs Skills ..... 327
*Rajiv Kumar, Reena Kukreja*

Designing Metadata Specification Template for User Interface in Transaction Processing System ..... 333
*Pranay Singhal, Damini Nehete, Parag S. Deshpande*

Traversing the Perception Maze: Delving into the Intricate Terrain of Potential Customer Perceptions in the Realm of Organic Foods Through the Application of Text Mining ..... 338
*P. Nalini, S. Jaisankar, V. Anandavel*

Blockchain Integrated Retail Logistics Chain: An Adoption Perspective ..... 343
*Nishant Kumar, Meenakshi Kaul, Chandrashekhar J Rawandale, Shailender Singh, Aditya Kumar Gupta*

Healthcare Management System to Improve Data Analytics Using Support Vector Machine Algorithm ..... 348
*A. Edwin Raj, V. Bini Marin, C. Balakrishnan, K. Elangovan, R. Meenakshi, M. Muthulekshmi*

Adaptive Cleaning in Manufacturing: A Decision Tree Model for Efficient Factory Sanitation..... 354
*M. Arulprakash, Ramakrishnan Raman, Atul A Gokhale, K. Saravanan, Ishwarya M. V, S. Sujatha*

Oral Cancer Detection Using Convolutional Neural Network ..... 359
*M. E. Paramasivam, B. S. Sriganesh, S Sureshkrishna*

Plant-Based Milk to Overcome Lack of Infrastructure in Traditional Dairy Industry..... 365
*Sheik Asraf. S, Krishna Reddy Penugonda, Lokesh Chenna, Mahesh Jella, Joshna Badri, Annie Magdaline S*

Exploring Regression Models and Optimization Techniques for Accurate Body Fat Prediction: A Comparative Approach..... 368
*Anshul Kunwar, Shreya Pandey, Aman Pandey, Kemee, Sheikh Afaan Farooq*

A Fuzzy Inference System for Sustainable Outfit Recommendations in the Fashion Industry ..... 374
*Raunak Raj, Veerpal Kaur, Kewal Krishan, Aadrita Nandy, Jyoti Choudhary, Ajay Kumar*

Securing the Internet of Things: Using Machine Learning for Malware Detection with CIC-MalMem Dataset ..... 380
*Anshika Sharma, Himanshi Babbar, Amit Kumar Vats*

A Supervised Machine Learning Framework for Early Detection of Man-In-The-Middle Attacks ..... 385
*Anshika Sharma, Himanshi Babbar, Amit Kumar Vats*

SONAR Based Under Water Mine Detection Using Machine Learning Algorithms ..... 391
*B. Nikhil Krishna Reddy, Rashmi M. R, Chockalingam Aravind Vaithilingam, S. Kamalakkannan*

Revolutionizing Text Summarization: A Comprehensive Comparative Analysis of NLP-Based Models..... 395
*Deepak Kumar, Chaman Verma, Nitika Nitika*

Cloud-Based Oxygen Management System with Seamless HTTP Protocol Integration..... 400
*S. Hemalatha, Jayabharathi Ramasamy, K. Selvi, P. Anandan, R. Meenakshi, S. P. Maniraj*

Equipment Monitoring in Manufacturing Using Bluetooth Low Energy (BLE)..... 406
*Shilpa Parkhi, Kiran Karande, Shreeya Chidambar Rajpurohit*

Modern Business Decisions Based on Cloud-Based Genetic Algorithms with Unleash Strategic Optimization.....411
*M. M. Shanmugapriya, D. Venkatramaraju*

Application of Multi-Criteria Decision-Making in Health Care Towards Various Disease Prediction ..... 417
*Ajay Kumar, Rajeev Singh, Sanjeev Kumar*

Stress Prediction Through Sleep Parameters Using a Feature Engineering Approach ..... 422
*Krishna Kumar Singh, Madhumita Mahapatra, Ganesh Kumar Dixit*

Exploring the Potential of Blockchain Technology in Digital Marketing: A Quantitative Study of Digital Marketing Professionals ..... 428
*Chitra Krishnan, Supriya Lamba Sahdev, Astha Gupta*

Impact of Connection Topology in Neuronal Communication ..... 434
*Anindita Bhattacharjee*

Factors Influencing Acceptance and Adoption of Automation of Banking Sector in India Using Theory of Diffusion of Innovation ..... 439
*Vikrant Vikram Singh, Harendra Singh, Aditya Kumar Gupta, Shailendra Singh*

Challenges Hindering the Digitalization and Innovation of Smart Real Estate in India: A Managerial Insight into Technology Non-Adoption ..... 445
*Aleem Ansari, Vikrant Vikram Singh, Aditya Kumar Gupta*

Factors that Affect Gamers Purchase Intention to Buy Online Mobile Game Items ..... 451
*Johanes Onggo, Fransiskus Ferrel, Fidelis Diva Adinusa, Anderes Gui*

Decentralized Digital Identity Verification System Using Blockchain Technology ..... 457
*Vibha Nehra, Aakarsh Mj, Hitesh Khanna, Naman Jindal*

Building Empathic Chabot Using LSTM and NLP ..... 463
*Jeyalakshmi, Srinidhi S, Balaprathap C*

Cyber Security Risk Assessment for Electronic Medical Records (EMRs) ..... 468
*Raghav Sandhane, Kanchan Patil, Arun Rajesh Sharma*

User Behavior Analysis to Detect Insider Threat by Using Machine Learning Algorithms ..... 474
*Nitin Dixit, Rishi Gupta, Pradeep Yadav*

Utilizing Ensemble Learning to Enhance the Detection of Malicious URLs in the Twitter Dataset ..... 478
*Rakhi Arora, Rishi Gupta, Pradeep Yadav*

Classification of Peripheral Pulse Morphology Using Convolutional Neural Networks ..... 484
*Nishant Patil, Sanjeev Rai, Gajanan Nagare*

Real Time Performance Monitoring of Solar PV Panel IoT System for Energy Optimization ..... 490
*Ganesh Asaram Bhatane, Vitthal Janardhan Gond, Sachin Vasant Chaudhari, P. William*

Innovative Practices of Waste Heat Recovery Systems Utilizing Turbo-Compounding and Organic Rankine Cycle ..... 494
*Akash Gholap, Prashant Londhe, Onkan Ghige, Pranav Nagare, Prajwal Lohakane, Yogesh Ahire*

Security Enhancement in Iot Based Smart Grid System Using Cryptographic Techniques ..... 500
*P. William, Sohini Chowdhury, Ali Falah, Ahmed Hussain, Rakesh Kumar, A L N Rao*

AI and Machine Learning Techniques for Managing Complexity, Changes and Uncertainties in Manufacturing ..... 506
*P. William, Yadaiah Nirsanametla, Ahmed Al-Samalek, Ahmed Hussain, Neeraj Varshney, Aln Rao*

Compounding Process Optimization for Recycled Materials Using Machine Learning Algorithms ..... 512
*P. William, Sohini Chowdhury, Ahmed Al-Samalek, Ahmed Hussain, Kamal Sharma, Arun Pratap Srivastava*

Dynamic Energy-Aware Cloudlet-Based Mobile Cloud Computing Model for Green Computing ..... 518
*P. William, Rahul Singh, Ahmed Al-Samalek, Ahmed Hussain, Arti Badhoutiya, A Kakoli Rao*

Framework to Design Multibeam Antenna Technologies for 5g Wireless Communications ..... 524
*Monika Agrawal, Rajan Verma, Ali Falah, Ahmed Hussain, Arun Pratap Srivastava, Rakesh Kumar*

Fuel Quantity and Quality Detection in Automobiles Using IoT ..... 530
*Sabeenian Rs, Surya Narayanan Cs, Rithvikailas G, Praveen S, Manjunathan Alagarsamy, P. William*

Gesture Controlled Vehicle for Armed Service ..... 536
*P. M. Dinesh, Manjunathan Alagarsamy, Ayub Khan A, K. Rameshkumar, G. Pavithra, P. William*

Deep Learning-Based Prediction of Knee Innovative Practices..... 542
*P. M. Dinesh, Kanith Kumar Govindaraj, Nithi Manivannan, M. E. Paramasivam, P. William, Manjunathan Alagarsamy*

Smart Question Paper Generator Using Oracle Apex Framework ..... 548
*M. E. Paramasivam, P. M. Dinesh, R. S. Sabeenian, P. William, R. Balamurugan, Manjunathan Alagarsamy*

IoT and AI Synergy: Remote Patient Monitoring for Improved Healthcare..... 553
*Sathishkumar Chintala*

Transformative Impact of Artificial Intelligence and Cybersecurity on Bitcoin's Trajectory ..... 559
*Mohammad Ahmar Khan, Richa, Yvr Naga Pawan, Vandana Madaan, Vikas Verma, Raj A. Varma*

Comfort Enhancement for Tractor Drivers in Agricultural Field Using Semi Active Seat Suspension..... 565
*Harbhinder Singh, Munish Mehta*

Prediction of Bank Telemarketing Campaign Using Machine Learning Approach..... 569
*Abdul Malik Ansari, Abhinandan Das, Sanjeev Gour, Pooja Joshi, Swati Namdev, Ruby Bala Pathak*

Sentiment Analysis of Live Stream Comments Using Machine Learning Algorithms..... 574
*Ramiyan Bhardwaj, Jitendra Singh, Ashutosh Singh, Rajkumar Suresh Singh, Surinder Pal Singh, Vinod Kumar*

Accelerating Drug Discovery: Ai Powered Approaches in Pharmaceutical Research..... 580
*Sathishkumar Chintala*

Strategic Integration of Engineering and Management: Navigating Complex Challenges for Organizational Success..... 586
*N R Vembu, Rajni Saluja, Jay B. Trivedi, Bhanu Pratap Singh, Mani Tyagi, Ranchay Bhateja*

Analysis of Innovative Practices on Steganographic Process with AI Based Algorithms ..... 592
*Ayushi Chaudhary, Ashish Sharma*

Analysing Employee Management Using Machine Learning Techniques and Solutions in Human Resource Management ..... 598
*Ch Chandana, Amit Sarkar, Kalpana Deshmukh, Priyanka Kulkarni, Purnendu Bikash Acharjee, Melanie Lourens*

Cognitive Outcomes Prediction in Children Using Machine Learning and Big Data Analytics ..... 604
*Nihar Ranjan Behera, Thiyagarajan V S, Geetha Manoharan, Ch Veena, Purnendu Bikash Acharjee, Anantha Murthy*

Role of Artificial Intelligence and Robotics in Shaping the Students: A Higher Educational Perspective..... 610
*Venkata Harshavardhan R. Dornadula, A. Kamatchi, T. Manichander, Sandeep Mehra, Punit Pathak, Christabell Joseph*

Survey and Analysis of DDOS Attack Detection by Hybrid Deep Learning Methodologies..... 615
*Dhananjay Shripad Rakshe, Sweta Jha, Sachin K. Korde, Pawan R. Bhaladhare*

Technology Trends in Synthetic Media – Bibliometric Analysis of Existing Literature and Future Scope..... 621
*Vidyavati Ramteke, Manojkumar Babu, Pradeep Verma*

Musical Genres Classification Utilizing the Pre-Trained ResNet50 CNN Model and Deep Learning Techniques..... 627
*Khushi Mittal, Kanwarpartap Singh Gill, Mukesh Kumar, Ruchira Rawat, Kanegonda Ravi Chythanya*

Neural Networks Utilization for Oil Spill Classification Using a Sequential CNN Model..... 632
*Khushi Mittal, Kanwarpartap Singh Gill, Deepak Upadhyay, Vijay Singh, Kanegonda Ravi Chythanya*

Urban Sound Classification Using VGG19 Convolutional Neural Network (CNN) Model and Its Visualisation..... 637
*Muskan Agarwal, Kanwarpartap Singh Gill, Priyanshi Aggarwal, Ramesh Singh Rawat, G Sunil*

Identifying and Classifying Electrical Faults by Putting the XGBoost Classifier Through Its Efficiency..... 642
*Kaushiv Garg, Kanwarpartap Singh Gill, Mukesh Kumar, Ruchira Rawat, G Sunil*

Using Machine Learning and the K-Nearest Neighbour Classification Method to Assess Autism Risk..... 647
*Muskan Singla, Kanwarpartap Singh Gill, Priyanshi Aggarwal, Ramesh Singh Rawat, Yerrolla Chanti*

Smote Analysis-Based Classifier and Data Equalisation of Bankruptcy Using Logistic Regression Classification Technique Through Machine Learning Applications..... 653
*Muskan Singla, Kanwarpartap Singh Gill, Hemant Singh Pokhariya, Ramesh Singh Rawat, Kanegonda Ravi Chythanya*

Dust Suppression in Urban Environments: An Integrated Approach with Road Sweeper Robots..... 658
*Ramakrishnan Raman, Vaibhav Sonule*

Distributed Ledger Technology for Decentralized Virtual Traffic Light Systems in Sustainable Cities..... 663
*Ramakrishnan Raman, Sujata Arya*

In the Blink of an Eye: Insomnia Microexpression Classification Using CNN-LSTM..... 668
*Pritha Singha Roy, Vinay Kukreja, Nisha Chandran S, Ankur Choudhary*

High Speed Data Transfer Using SOA Enabled WDM-PON Network..... 674
*Mayur Makwana, Shailesh Khant, Atul Patel*

WASCO Routing Protocol: Enhancing Security in Vehicular Adhoc Networks (VANETs) Using Weighted Average Sandpiper Coot Optimal Approach..... 680
*Anand N. Patil, Sujata V. Mallapur*

A Survey on Collaborative Portal for Academic and Research Activities Using Process Automation ..... 688
*Revathy P, Bhuvaneshwar B, Sujitha U, Vamsha Metilda M J*

Efficient Neural Network Compression Through Booth Coding and Exponential of Two Quantization for Enhanced Inference Performance ..... 694
*V. A. Ashik Vijay, Abhishek S, Arunkumar. K*

Real-Time Video Management for Gas Pipeline Breakage Detection Robot Using IoT ..... 699
*Ramakrishnan Raman, Ashutosh Panchbhai*

A Distributed Network Monitoring and Positioning System Based on TDOA ..... 704
*Yadaiah Nirsanametla, Kuldeep Sharma, Anurag Shrivastava, Arun Pratap Srivastava, Kanchan Yadav, Amit Srivastava*

Aggregate Signature Authentication Scheme Based on Blockchain in Smart Home Network ..... 710
*Sohini Chowdhury, Rupali Gill, Arti Badhoutiya, Arun Pratap Srivastava, Akhilesh Kumar Khan, Rajesh Singh*

Application of Mobile Cloud Computing Using Crowdsourcing to Provide Quality of Service ..... 716
*Rajan Verma, Rishu Chhabra, Rakesh Kumar, A Kakoli Rao, Navneet Kumar, Anita Gehlot*

Efficient Classification for Neural Machines Interpretations Based on Mathematical Models ..... 724
*Rahul Kumar, Monit Kapoor, Neeraj Varshney, Manish Saraswat, Akhil Sankhyan, Devendra Singh*

Securing Smart Health Care Systems and Infrastructure Using Artificial Intelligence ..... 730
*Rahul Singh, Harpreet S. Bhatia, Kanchan Yadav, A Kakoli Rao, Navneet Kumar, Anita Gehlot*

A Study on the Security Models and Strategies of Cloud Computing ..... 736
*Deepak Kumar, Sandeep Kumar, Neeraj Varshney, A Kakoli Rao, Navneet Kumar, Archana Saxena*

Optimizing Power Distribution Grids Using Particle Swarm Optimization Algorithm ..... 742
*Gaurav Kumar, Kuldeep Sharma, Kamal Sharma, Shashi Prakash Dwivedi, Anurag Shrivastava, Yashwant Singh Bisht*

A Comparative Analysis of Machine Learning Algorithms for Predictive Maintenance in Electrical Systems ..... 748
*Suresh Singh, Rupali Gill, Rakesh Kumar, Anurag Shrivastava, Arun Pratap Srivastava, Gaurav Thakur*

Dynamic Load Balancing in Cloud Computing Environments: A Genetic Algorithm Approach ..... 754
*Devender Kumar, Rishu Chabra, Anurag Shrivastava, Rakesh Kumar, Mukesh Kumar, Ankita Joshi*

Energy-Efficient Routing Algorithms for Wireless Sensor Networks in Precision Agriculture ..... 760
*Komal Sharma, Monit Kapoor, Anurag Shrivastava, Arti Badhoutiya, A Kakoli Rao, Ruby Pant*

Hybrid Metaheuristic Algorithms for Resource Allocation in Fog Computing Environments ..... 766
*Pranav Kumar, Harpreet S. Bhatia, Anurag Shrivastava, Kanchan Yadav, Manish Saraswat, Deepa Bisht*

Real-Time Fault Detection and Classification in Smart Grids Using Support Vector Machines ..... 772
*Sarita Gupta, Gopal Krishan Gard, Neeraj Varshney, A L N Rao, Amit Srivastava, Deepti Sharma*

An Efficient Parallel Algorithm for Graph Processing in Cyber-Physical Systems ..... 778
*Meenu Khurana, Sandeep Kumar, Arun Pratap Srivastava, Arti Badhoutiya, Akhilesh Kumar Khan, Rajesh Pant*

Fuzzy Logic-Based Control Algorithm for Smart Microgrid Energy Management ..... 784
*Ashok Kumar, Kuldeep Sharma, Kanchan Yadav, A L N Rao, Amit Srivastava, Shivani Pant*

Predicting Employee Attrition Through HR Analytics: A Machine Learning Approach..... 790
*Pooja Nagpal, Avinash Pawar, Sanjay. H. M*

Top Management Team and Firm Performance: Evidence from Oman ..... 794
*Fayaz Ahamed, Umair Saeed Bhuttaa*

A Novel Quantum Algorithm for Solving Optimization Problems in Electrical Engineering..... 797
*Ajay Sharma, Kuldeep Sharma, Kanchan Yadav, A L N Rao, Amit Srivastava, Shivani Pant*

Distributed Consensus Algorithms for Reliable Communication in Multi-Agent Systems..... 803
*Satyendra Singh, Gopal Krishan Gard, Neeraj Varshney, A Kakoli Rao, Navneet Kumar, Deepti Sharma*

Particle Filter-Based Localization Algorithm for Autonomous Robots in Smart Factories..... 809
*Yadaiah Nirsanametla, Kuldeep Sharma, Kanchan Yadav, A L N Rao, Amit Srivastava, Sanjeev Kumar Shah*

Qubit Allocation Strategies in Quantum Computing for Improved Computational Efficiency..... 815
*Sohini Chowdhury, Rupali Gill, Arti Badhoutiya, Arun Pratap Srivastava, Akhilesh Kumar Khan, Rajesh Singh*

Genetic Algorithm-Based Optimization of Photonic Devices for Data Center Communication..... 821
*Devender Kumar, Rishu Chabra, Anurag Shrivastava, Rakesh Kumar, Mukesh Kumar, Ankita Joshi*

Multi-Objective Evolutionary Algorithms for Hardware Design Space Exploration ..... 827
*Rahul Kumar, Monit Kapoor, Neeraj Varshney, Anurag Shrivastava, Manish Saraswat, Devendra Singh*

Dynamic Spectrum Access in Cognitive Radio Networks: A Reinforcement Learning Approach..... 833
*Gaurav Kumar, Sandeep Kumar, Anurag Shrivastava, Arun Pratap Srivastava, Arti Badhoutiya, Rajesh Pant*

Revitalizing the Blue Frontier: Survey on Strategies and Innovations for Empowering Marine Species Conservation..... 839
*Sorna Shanthi D, Vijay K, Praveen N, Priyan B*

System Dynamic Approach in Smart City for Optimal Energy Consumpsion ..... 845
*Navita Mahajan, Vandit Kapoor, Sneha Mukhopadhyay, Pritish Mahajan*

Digital Social Inclusivity for Optimization of Security System of Smart Cities ..... 850
*Navita Mahajan, Yashika Gaarg, Shivam Gupta, Vansh Garg, Pritish Mahajan*

Enhancing Solar Energy Harvesting Efficiency: A Dual-Axis Solar Tracking System ..... 855
*Ravikumar S, Eugene Berna I, Vijay K, Pradeep R, Babu R*

Cyber-Physical Testbed Frameworks for Digital Infrastructure ..... 860
*Arun Kumar Maurya*

Modelling for Smart Outsourcing Decisions: Impact of Foreign Exchange Rate Volatility ..... 865
*Navita Mahajan, Navleen Kaur, Swarlipi Saha, Palak Thakur, Pritish Mahajan*

Hybrid CNN & Random Forest Model for Effective Bitter Orange Leaf Disease Diagnosis ..... 868
*Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar*

Holistic Approach to Citrus Canker Disease Recognition: Harnessing CNN and Random Forest Models ..... 874
*Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar*

Hybrid CNN & Random Forest Model for Effective Clove Leaf Disease Dignosis ..... 880
*Deepak Banerjee, Neha Sharma, Deepak Upadhyay, Vijay Singh, Gotte Ranjith Kumar, Kanwarpartap Singh Gill*

Hybrid CNN & Random Forest Model for Effective Ginger Leaf Disease Diagnosis ..... 886
*Deepak Banerjee, Neha Sharma, Deepak Upadhyay, Sarishma Dangi, Nagendar Yamsani, Kanwarpartap Singh Gill*

Improving Precision in Rose Leaf Disease Recognition with Integrated CNN and SVM Models ..... 892
*Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar*

Synergistic Detection: A Hybrid CNN-XGBoost Model for Cherry Leaf Spot Magnitude Differentiation ..... 898
*Deepak Banerjee, Neha Sharma, Rahul Chauhan, Mukesh Singh, Bura Vijay Kumar*

Data Mining Applications in Healthcare: A Comparative Analysis of Classification Techniques for Diabetes Diagnosis Using the PIMA Indian Diabetes Dataset ..... 904
*Prashant Verma, Aasiya Khatoon*

A Heuristic Model for Personalised Risk Assesment of PCOS ..... 909
*Nimisha Singh, Vandana Sharma, Varuna Gupta*

The Prediction of Hairfall Pattern in a Person Using Artificial Intelligence for Better Care and Treatment ..... 915
*Sheikh Afaan Farooq, Aleem Ali, Anzah Bashir*

Effective Brain Controlled Interface for Wheelchair: An Organized Review ..... 921
*Kumar Avinash Chandra, Prabhat Kumar Upadhyay*

UAV Image Classification for Land Cover Mapping: A CNN-Based Approach in IoT Networks ..... 927
*Ananya Sharma, Ramakrishnan Raman*

A Study on Unlocking the Potential of Different AI in Continuous Integration and Continuous Delivery (CI/CD) ..... 932
*Priyanshi Sharma, Mugdha Shailendra Kulkarni*

Digital Forensics: Legal Standards and Practices in Cybercrime Investigation ..... 938
*Sourabh Sharma*

Precision Balancing: Machine Learning Models and Selective Strategies for Intraday Trading Success ..... 944
*Akash Poptani*

A Survey of Machine Learning Techniques for Prediction of Alzheimer's Disease ..... 950
*Priyanka Rani, Jasminder Kaur Sandhu, Rakesh Sahu*

Experimental Study on Analysis of Energy Harvesting and Smart Grid-Powered Wireless Communication Networks ..... 956
*R Vijaya Prakash, M. S. Gowtham, Amit Dutt, B. Pravallika, Revathi V, M. Kalyan Chakravarthi*

Transformative Dynamics: Unveiling the Influence of Artificial Intelligence, Cybersecurity, and Advanced Technologies in the Bitcoin ..... 962
*Bhavana Jamalpur, Gur Sharan Kant, Atul Singla, Ch Veena, Vijilius Helena Raj, Mohammed Rasheed Majeed*

AI Based Framework for Sustainable Business Management Using Machine Learning Models ..... 968
*Ananda Ravuri, Dillip Narayan Sahu, Amit Dutt, V Divya Vani, B Rajalakshmi, K. Saketh Reddy*

Artificial Intelligence-Driven Talent Management System: Exploring the Risks and Options Sustainable Success ..... 974
*Melanie Lourens, C. Vijai, Ginni Nijhawan, Yogita Satish Garwal, Shweta Gakhreja, Aseel Muhammad Saud*

Image-Based Time Series Forecasting: A Deep Convolutional Neural Network Approach ..... 980
*Jnaneshwar Pai Maroor, Dillip Narayan Sahu, Ginni Nijhawan, A Karthik, A. K. Shrivastav, M. Kalyan Chakravarthi*

Investigation on Deep Learning and Machine Learning Approaches for Antenna Design Based on Radar Signal Processing ..... 986
*Santhakumar Govindasamy, Kavi Bhushan, Ginni Nijhawan, B Santhosh Kumar, Rakesh Chandrashekar, Ali Ashoor Issa*

Hyperspectral Information with Big Data and Machine Learning for Agriculture ..... 992
*Yogini Dilip Borol, K. T. Thilagham, Amandeep Nagpal, Ala Harika, Aravinda K, Ammar H. Shnawa*

Innovative Practices on Machine Learning Models for Statistical Interpretation ..... 998
*Gunasekaran K R, K G Raja Sabarish Babu, Amandeep Nagpal, Kilaru Aswini, L. Priyadharshini, K. Niranjana*

Internet of Things Structure for Intelligent Energy in Structures: Concepts, Model, and Tests ..... 1004
*Dayakar Babu Kancherla, L. Priyadharshini, Amandeep Nagpal, R Anuradha, Vijilius Helena Raj, Mohammed Brayyich*

A Review of the Literature on the Effects of Big Data and Machine Learning on Digital Transformation in Marketing ..... 1010
*S. Thangamayan, C. Vijai, Navdeep Singh, Vijaya Durga, Aravinda K, Hawraa Ali Sabah*

A Comprehensive Analysis of the Internet of Things (IOT) in the Context of 5G Wireless Systems ..... 1016
*Milad Mohseni, Budesh Kanwer, Navdeep Singh, M Hari Krishna, B Rajalakshmi, Mohammed Ayad Alkhafaji*

Analysis of IoT-Driven Machine Learning Algorithms for Predicting Respiratory Diseases ..... 1022
*Mukesh Madanan*

Big Data and Machine Learning: Barriers and Methods ..... 1028
*Monika Agrawal, Swati Goel, P. William, Ritesh Agwan, Sonal C. Bhangale, Onkar Ghige*

The Application of Personalization, MachineVoice, Credibility, Assessement and Evaluation in Artificial Intelligence of Higher Education ..... 1034
*Divay Mehta, Niti Chatterji, Aditya Kumar Gupta, Prashant Dev Yadav, Snigdha Dash, Pranay Verma*

A Survey of Machine Learning Approaches for Parkinson's Disease Prediction ..... 1039
*Kuldeep Sharma, Rakesh Sahu, Jasminder Kaur Sandhu*

Green HRM & Environmental Performance: Past, Present and Future Research ..... 1045
*Mohit Yadav, Prashant Singh, Deepak Kumar Sahoo, Subhasree Kar, Nisha Gaur, Ta Huy Hung, Anugamini Priya Srivastava*

Identification of an Efficient Machine Learning Algorithm for the Prediction of Customer Churn: A Case Analysis of a Business-To-Consumer (B2C) Dairy Company for Customer Retention Strategy ..... 1051
*A. Mohammed Faisal, V. Rajkiran, K. Sankar Singh, P. Elantheraiyan, S. K. Kamalakhannan*

Analysis of Eye Disease Classification by Fundus Images Using Different Machine/Deep/Transfer Learning Techniques..... 1056
*Himanshu Sharma, Javed Wasim, Pankaj Sharma*

A Comprehensive Study of Agile Project Management Tools..... 1062
*Shivani Arya, Mugdha Shailendra Kulkarni*

Inclusion of Neural Networks in Higher Education: A Systematic Review and Bibliometric Analysis..... 1068
*Mohan Kumar, Abhishek Jain, Arun Mittal, Rudra Gera, Saroj Kanta Biswal, Mohit Yadav, Ta Huy Hung, Anugamini Priya Srivastava*

From Tweets to Talent: Tracing the Trajectory of Social Media in Recruitment..... 1074
*Rahul Khurana, Saroj Kanta Biswal, Deepak Kumar Sahoo, Subhasree Kar, Mohit Yadav, Anugamini Priya Srivastava, Ta Huy Hung*

Unleashing Big Data in Entrepreneurship: Trends, Challenges and Prospects..... 1078
*Shefali Srivastava, Puneet Prashar, Priyank Kumar Singh, Krishna Mohan Shukla, Saroj Kanta Biswal, Arun Mittal, Anugamini Priya Srivastava, Rahul Khurana, Mohit Yadav, Ta Huy Hung*

Big Data in Education: Past, Present and Future ..... 1082
*Dipandi Mishra, Mohit Yadav, Saroj Kanta Biswal, Rahul Khurana, Anugamini Priya Srivastava, Ta Huy Hung, Rohit Yadav*

Cloud Computing and Its Impact on the Private Label Business of Dabur India Ltd..... 1088
*Navneet Gaur, Alka Maurya, Amrish Kumar Choubey*

Unmasking Deepfakes: Understanding the Technology, Risks, and Countermeasures ..... 1093
*Preeti Rathi, Sandeep Kumar Budhani, Govind Murari Upadhyay, Prashant Vats, Ranjeeta Kaur, Ashok Kumar Saini*

Targeting Insider Threats and Zero-Day Vulnerabilities with Advanced Machine Learning and Behavioral Analytics ..... 1099
*Somnath Raghunath Wategaonkar, Alakbarova Tamara Shaki, Abbasova Parvin Ali, Zeynalov Javanshir Ibrahim, L. N. Jayanthi, S. Nalini Jayanthi*

The Influence of Social Media on the Travel Planning Process and Tourist Locations.....1105
*Michella Sherine Lewis, Anderes Gui*

MFFCNN: Multi-Feature Fusion-Based Deep Learning Architecture for Typewritten Word Recognition System ..... 1111
*Gurvir Kaur, Ajit Kumar*

NIDR: Network Interference Detection and Rectification ..... 1117
*Rose Mary K A, Celestine Joy, Denin Devis, Irene Fransisco, Deepa Devassy, Livya George*

Designing Embedded System Laboratory Using Arduino Controller for Online BCA Education ..... 1121
*Atul Patel, Shailesh Khant*

Simple Non-Invasive Coronary Artery Disease Detection Using Machine Learning ..... 1127
*S. Kalpana, S. R. Srither, N. R. Dhineshbabu, G. Nikitha*

Green IT, Branding, and Sustainability: A Synergistic Approach for Environmental Responsibility ..... 1133
*Anamica Singh, Anchal Luthra, Rashmi Malhotra, Seema Garg, Shivani Dixit, Ritu Sharma, Ashutosh Bhushan*

Fake News Detection Using Supervised Binary Classification Techniques ..... 1137
*Riya Kukreti, Girish Singh Bisht, Ritu Pal, Jagdish Chandra Patni, Vaibhavi Painuly*

Combating Technostress Through Sustainable Lens ..... 1142
*Chanda Gulati, Abhijeet Singh Chauhan, Brahmmanand Sharma*

The Virtual Hitchhiker: Navigating the Digital Landscape of Online Cab Services ..... 1148
*Brahmmanand Sharma, Vivek Shrivastava, Sonal Saxena, Pradeep Kumar Mishra*

Enhanced Deep Learning Approach for Text to Image Conversion Using Lip Movements ..... 1154
*Andhoju Karthikeya, Alle Aniesh Kumar, Chennuri Manicharan, Shanmugasundaram Hariharan, Vinay Kukreja, Andraju Bhanu Prasad*

Green Innovation, Firm Performance and Competitive Advantage: The Mediating Role of Green Leadership ..... 1159
*Namrata Pancholi, Seema Garg, Anshita Garg, Ritu Sharma, Alka Maurya, Kavita Thapliyal*

Using Machine Learning-Based Algorithms to Predict Academic Performance - A Systematic Literature Review ..... 1163
*Meng Wu, Geetha Subramaniam, Dan Zhu, Cailing Li, Hongyuan Ding, Yirong Zhang*

Artificial Intelligence Enabled Hybrid Machine Learning Application for Dyslexia Detection Using Optimized Multiclass Support Vector Machine and Personalized Interactive and Assistive Tools Using Adaptive Reinforcement ..... 1171
*C. Rajan, Bala Suruthika A G, Sudharshini B, Gowtham K*

Performance Analysis of 6T SRAM Cell and 8T SRAM Cell Techniques Using 18nm FinFET Technology ..... 1176
*Ravi Ranjan Kumar, Vikrant Sharma, Anuj Kumar Jain, Sandip Kumar Goyal, Purushottam Das*

Synergistic Models for Marigold Leaf Disease Recognition: A Fusion of CNN and Random Forest Frameworks ..... 1180
*Ravi Ranjan Kumar, Vikrant Sharma, Anuj Kumar Jain, Sandip Kumar Goyal, Purushottam Das*

Daffodil Leaf Disease Recognition Framework: A Unified Approach with CNN and Random Forest Integration ..... 1186
*Ravi Ranjan Kumar, Anuj Kumar Jain, Vikrant Sharma, Nitin Jain, Purushottam Das*

Towards Precision Agriculture: A Unified CNN and Random Forest Framework for Jasmine Leaf Disease Recognition ..... 1192
*Ravi Ranjan Kumar, Anuj Kumar Jain, Vikrant Sharma, Purushottam Das, Manu Midha, Mukesh Singh*

The Integration of IoT in Learning Environments: Assessing the Impact of Educational Empowerment and Addressing Its Challenges ..... 1198
*Ricky Rajora, Aarju Rajora, Bhanu Sharma, Priyanshi Aggarwal, Siddhant Thapliyal*

The Impact of the IoT on Military Operations: A Study of Challenges, Applications, and Future Prospects ..... 1203
*Ricky Rajora, Aarju Rajora, Bhanu Sharma, Priyanshi Aggarwal, Siddhant Thapliyal*

Sensing the Future: Challenges and Trends in IoT Sensor Technology ..... 1208
*Ricky Rajora, Aarju Rajora, Bhanu Sharma, Priyanshi Aggarwal, Siddhant Thapliyal*

Comprehensive Analysis of Different Types of Load Frequency Control Algorithms for Tie Line Connected Power System ..... 1213
*Kanak Gahlaut, Arun Kumar Maurya, Hemant Ahuja*

A Study on Neuromarketing Variables in Automobile Sector with Special Reference to Indian Consumers ..... 1219
*Mili Dutta, Shruti Trayambak, Meghna Sharma*

Classifying Lung Cancer Disease Using Random Forest Algorithm ..... 1225
*Vijay Madaan, Neha Sharma, Rahul Chauhan, Kireet Joshi, Bura Vijay Kumar, G Sunil*

Secured and Optimized Application Delivery Service in Public Cloud ..... 1231
*Sengottaiyan N, Gnanaprakasam T, Rajesh Sharma R, Akey Sungheetha, Chinnaiyan R, S Hamsanandhini*

Motion Detection Using Heuristic AI Based Machine Learning Approaches ..... 1236
*Rajesh Sharma R, K Rajiv Gandhi, K Shanmugaraja, Akey Sungheetha, Chinnaiyan R, J. Jegan*

Smart Measuring Device for Power with Digital Debiting System Using Mobile Application Tool ..... 1240
*Rajesh Sharma R, Rajiv Gandhi, Akey Sungheetha, Chinnaiyan R, Deepaletchumi N*

Compact 1D Self-Operational Neural Networks with Feature Injection for Global ECG Classification ..... 1246
*Sengottaiyan N, Sathish Kumar S, Rajesh Sharma R, Akey Sungheetha, Chinnaiyan R, S Hamsanandhini*

Evaluation of Consumer Behavior Regarding Food Delivery Applications in India ..... 1252
*Ray Titus, Tina Babu, Rekha R Nair, Rajesh Sharma R, Chinnaiyan R, Akey Sungheetha*

Nostalgic Resonance: Exploring the Impact of Rebranding on Consumer Behavior ..... 1258
*Ray Titus, Chinnaiyan R, Akey Sungheetha, Rajesh Sharma R, Tina Babu, Rekha R Nair*

Unveiling Consumer Online Reviews: An In-Depth Analysis of Uses and Gratificatications ..... 1264
*Ray Titus, Rajesh Sharma R, Chinnaiyan R, Akey Sungheetha, Tina Babu, Rekha R Nair*

Optimal Portfolio Distribution Utilizing Markowitz's Model: An Investigation of 30 Stocks in the Sensex Index ..... 1270
*Raykwade Anil Dinkar, Abdul Hameed, Tina Babu, Rekha R Nair, Chinnaiyan R, Rajesh Sharma R, Akey Sungheeth*

Challenges and Opportunities: Assessing the Impact of GST on MSMEs and the Need for Ongoing Support ..... 1276
*Soumya Monachan, Abdul Hameed, Tina Babu, Rekha R Nair, Rajesh Sharma R, Chinnaiyan R, Akey Sungheetha*

Influence of Digital Transformation on the Banking Industry ..... 1283
*Bandi Sathwika, Abdul Hameed, Rajesh Sharma R, Tina Babu, Chinnaiyan R, Akey Sungheetha*

Dynamics of Mutual Funds in Response to Market Changes: A Post-COVID Analysis (2019-2023) ..... 1289
*Mahima Bhargava, Abdul Hameed, Tina Babu, Rajesh Sharma R, Chinnaiyan R, Akey Sungheeth*

Revolutionizing Gas Safety: The IoT Gas Detector with Automatic Regulator Control ..... 1295
*Kumar Keshamoni, Ganna Koteswara Rao, Bharatha Satheesh, Pabbala Priyanka*

Revolutionizing Skin Cancer Detection with Raspberry Pi-Embedded ANN Technology in an Automated Screening Booth ..... 1301
*S. Srinivasan, G. Indra, T R Saravanan, S. Murugan, C. Srinivasan, M. Muthulekshmi*

Analyzing the Digital Transformation and Evolution of Financial Technology (Fintech) Across Various Industries ..... 1307
*Sai Kumar Babu, Abdul Hameed, Rekha R Nair, Tina Babu, Rajesh Sharma R, Chinnaiyan R, Akey Sungheetha*

Effects of Non-Performing Assets on the Banking Sector in India ..... 1315
*Kschitez Raj, Abdul Hameed, Tina Babu, Rekha R Nair, Chinnaiyan R, Rajesh Sharma R, Akey Sungheetha*

Cognitive Therapy Or Delutions in Patients with Paranoid Schizophrenia ..... 1321
*Kiran Babu N C, Sukumar V, Krishnan Gireesh, Chinnaiyan R, Rajesh Sharma R, Akey Sungheetha*

Investigation of OWC System Incorporating Different Filters ..... 1325
*Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi, Vijay Madaan, G Sunil*

Investigation of LEO-GEO Inter-Satellite Scenarios Basics OWC Architecture ..... 1329
*Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi, Amit Kumar, G Sunil*

Four LG Modes MDM Based Hybrid FSO-Fiber Link for High Capacity PON ..... 1334
*Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi, Amit Kumar, G Sunil*

Design of a OWC System Using EDFA Amplifier ..... 1339
*Meet Kumari, Neha Sharma, Rahul Chauhan, Kireet Joshi, Amit Kumar, G Sunil*

Artificial Intelligence Assisted Classifier's and Neural Network Based Prediction and Classification of Parkinson's Disease ..... 1343
*Khushi Mittal, Kanwarpartap Singh Gill, Rahul Chauhan, Hemant Singh Pokhariya, Jayapal Lande*

Visualisation and Classification of Coffee Leaves Via the Use of a Sequential CNN Model Based on Deep Learning ..... 1349
*Muskan Singla, Kanwarpartap Singh Gill, Deepak Upadhyay, Vijay Singh, Gotte Ranjith Kumar*

Healthcare Bots for Elderly Assistance Using Cloud-Driven Gradient Boosting Machines ..... 1354
*P. Sudha Juliet, S. Sivakumar, K. Thinakaran, Porandla Srinivas, R. Thamizhamuthu, S. Velmurugan*

Deep Learning Based Modal for Predicting Flooding Pattern and Climate Shifts ..... 1360
*Lalita Kumari, Umesh Kumar, Niranjan Kumar*

IoT and Hydrogen Transport: Revolutionizing Fuel Cell Vehicle Infrastructure..... 1364
*Pachhaiammal Alias Priya M, P. Karthikeyani, N. Arunfred, M. Hariharan, K. Ramyadevi, S. Murugan*

Advanced Seizure Prediction System for Wearable Health Management Devices Using KNN Algorithm ..... 1370
*M. Raja Suguna, Nithisha J, A. Ramesh Babu, M. H Ananda, R. Venkatesan, N. Malathi*

Short-Term Prognosis of Asthma Flare-Ups: A Predictive Model..... 1376
*Saravanan K, Abhinav P R, Goldin Jackson R, Harini P*

Advanced Joint Monitoring System Utilizing Real-Time Data and KNN Algorithm for Prediction of Joint Health ..... 1381
*D. Antony Joseph Rajan, Ramakrishnan Raman, Ujal Kumar Mookherjee, Daxa Vekariya, T. R. Ganeshbabu, M. Rajmohan*

Visual Geometry Group Architectures for Brain Cancer Diagnosis Using MRI Scans..... 1387
*S. Dhanalakshmi, S. Arulselvi*

Autonomous Mobility: A Smart Wheelchair Ecosystem by IaaS Cloud Model Using AWS ..... 1392
*S. K. Saravanan, More Praveen, S. Aghalya, B. Shadaksharappa, N. Mohankumar, V. Nandagopal*

Implementation of PID Controller Tuning Method for Load Frequency Control in Multi Area Power System..... 1398
*Arun Kumar Maurya, Mahendra Dutt Dwivedi, Hera Khan*

Pixels to Pathogens: A Deep Learning Approach to Plant Pathology Detection ..... 1404
*Ayush Saha, Vandana Sharma, Rana Mondal, Sushruta Mishra, Ibukunoluwa Daramola, Aamir Abbas*

Cybersecurity Threats Detection in Intelligent Networks Using Predictive Analytics Approaches ..... 1410
*Shomili Duary, Pratyusha Choudhury, Sushruta Mishra, Vandana Sharma, Deepak Dasaratha Rao, Adedapo Paul Aderemi*

Non-Alcoholic Fatty Liver Disease Prediction with Feature Optimized XGBoost Model..... 1415
*Alyona Rout, Sushruta Mishra, Vandana Sharma, Onyeachonam Dominic-Mario Chiadika, Thomas Tega Tonukari, Celestine Iwendi*

Improved Acceptance Model: Unblocking Potential of Blockchain in Banking Space ..... 1420
*Ankit Kumar, Srijita Mallik, Sushruta Mishra, Vandana Sharma, Pradeep Hewage, Celestine Iwendi*

Enhancing Educational Adaptability: A Review and Analysis of AI-Driven Adaptive Learning Platforms ..... 1426
*Srijani Dutta, Sakshi Ranjan, Sushruta Mishra, Vandana Sharma, Pradeep Hewage, Celestine Iwendi*

Enhancing Breast Cancer Detection Via Optimized Machine Learning..... 1431
*Ayush Thakur, Sanskar Chauhan, Astha Gupta, Amrish Kumar Choubey, Chitra Krishnan*

Adoption of Blockchain Technology in Productivity and Automation Process of Microfinance Services ..... 1436
*Nazia Hasan, Shweta Nanda, Gurinder Singh, Vinita Sharma, Gurleen Kaur, Vipin Jain*

Artificial Intelligence and Computational Ability in Digitizing Financial Products and Services by Micro-Entrepreneurs..... 1441
*Shweta Nanda, Gurinder Singh, Nazia Hasan, Pranay Verma, Anand Joshi, Rajiv Verma*

An Empirical Study of the Indian Automotive Industry Using Lean Transformation Integrated with Industry 4.0..... 1446
*Ashish Shrivastava, Anamica Singh, Rajesh Prasad Mishra, Shweta Nanda, Gurinder Singh*

Financial Literacy Through Gamification ..... 1451
*Navleen Kaur, Mokshita Gupta, Swaralipi Saha, Stephen Manallack, Prajawal Gupta*

**Author Index**