

# **2021 6th International Conference on Inventive Computation Technologies (ICICT 2021)**

**Coimbatore, India  
20 – 22 January 2021**

**Pages 1-672**



**IEEE Catalog Number: CFP21F70-POD  
ISBN: 978-1-7281-8502-6**

**Copyright © 2021 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:	CFP21F70-POD
ISBN (Print-On-Demand):	978-1-7281-8502-6
ISBN (Online):	978-1-7281-8501-9

**Additional Copies of This Publication Are Available From:**

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

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

# **6<sup>th</sup> International Conference on Inventive Computation Technologies**

## **ICICT 2021**

### **Table of Contents**

<b>S. No</b>	<b>Paper Title/ Author Name</b>	<b>Page. No</b>
1	Design of Smart Car Networking System based on Multi-Sensor Network Rong Xu, Hui Liu, Harry Haoxiang Wang	1
2	Localization in Wireless Sensor Networks: A Compact Review on State-of-the-Art Models Shivakumar Kagi, Basavaraj S.Mathapati	5
3	Hexagonal Shaped Micro-strip Patch Antenna Design for 2.45 GHz WLAN System V. Prakasam, NavaBharat Reddy	13
4	Audio Transmission using Visible Light Communication and Li-Fi Technology Saranya S, Ragavi B, Pavithra L, Susheel S, Srivarsha M, Vishal V	19
5	Design of a CPW fed Microstrip Patch Antenna with Defective Ground Structure for Wireless Applications G. Anjaneyulu, J. Siddartha Varma	25
6	A Secure Network Monitored Balloting System Suryaa Pranav Meduri, Saketh Kamatham, Sneha Subramanian, Anupama Meduri, Neha Diwan	31
7	A Meta-Heuristic-based Green-routing Algorithm in Software-Defined Wireless Sensor Network Pooja Mishra, Neetesh Kumar, W Wilfred Godfrey	36
8	Low Distortion Resource Allocation in NOMA based Cognitive Radio Networks D. Prasanth Varma, K. Annapurna	42
9	Secure and Efficient Data Transmission for Wireless Sensor Networks by using Optimized Leach Protocol M. Jogendra Kumar, G. V. S. Raj Kumar, P S R Krishna, N. Raghavendra Sai	50
10	Novel Spread Spectrum Communication Theory and the Anti-jamming Applications Wenzhun Huang, Shanwen Zhang, Robert Hao Yan	56
11	Novel Authentication Mechanisms for Hash Code, CAPTCHA and OTP in Cyber Security Domain R. Kanniga Devi, M. Muthukannan, S. S. Harish Babu, Adith Sivadasan, S. Abinivesh	62
12	Attack Aware Centralized CSS under PEA and SSDFA Attacks Chaitanya Duggineni, Hima Bindu Valiveti	69
13	Microstrip Fractal MultiBand Antenna Design and Optimization by using DGS Technique for Wireless Communication Suresh Akkole, N. Vasudevan	72
14	Modified Grey Wolf Optimization based Advanced Encryption Standard based Cryptographic Technique for Digital Images S. Kaliswaran, M. Y. Mohamed Parvees	78
15	Multi User Authentication Using Biometric Sensor using Parallel Processing Algorithm for Attendance Monitoring M. Ramalingam, S. Vinothkumar, S. Varadhaganapathy, S. Subha	84
16	An Enhancement in Restructured Scatter-Gather Live Migration of Virtual Machine Yerakamma Chapala, B. Eswara Reddy	90

17	Circular antenna for the Descretization of Major Antenna Area Design Function using the smallest Length Antenna Sunitt Shantanu Digamber Fulari, Harbinder Singh	97
18	Survey on Detection of Credit Card Frauds using HMM and various Clustering Approaches Kaja Janvitha, Chandaluru Rohini Sri Vasavi, Adusumalli Sruthi, Kothuri Praharshitha, Dinesh Kumar Anguraj	101
19	Evolutionary Algorithm based Encoder Decoder Network Design for Semantic Inpainting and Noise Vector Mapping in Generative Adversarial Network Ankit. B. Saradagi, Jeyakumar. G	108
20	Analysis of Cluster Head Selection Methods In WSN A. Arulmurugan, Saiyed Faiyaz Waris, N. Bhagyalakshmi	114
21	Detection of Phishing Websites from URLs by using Classification Techniques on WEKA Buket Geyik, Kubra Erensoy, Emre Kocyigit	120
22	Review of Authentication Algorithms for Physical Layer Attacks Mahendra Balkrishna Salunke	126
23	Security in Mobile ADHOC Networks: Survey Sharat S Kariyannavar, Shreyas Thakur, Aastha Maheshwari	135
24	A Comprehensive Review on Energy Efficient Routing in Wireless Multimedia Sensor Networks Nagalingayya M, Basavaraj S Mathpati	144
25	A Study of Dual Band Reformed Square Slot DRA for Wireless System Poonam Lodhi, Meha Shrivastava, Abhishek Agwekar	152
26	IoT based Automated Indoor Agriculture System Using Node-RED and IBM Bluemix Valerie David, Harini Ragu, Rohith Kanna Duraiswamy, Sasikumar P	157
27	A Novel Ultrasonic based NDT for Smart Analysis of Material Defects using IoT P. Radha, N. Selvakumar, J. Raja Sekar, J. V. Johnsonselva	163
28	Application of Information Technology and Internet of Things in Intelligent Construction of Stadiums and Gyms Yanhua Wang	169
29	IoT based COVID De-Escalation System using Bluetooth Low Level Energy Mohit, P Sathyaseelan, M. Kalyan Chakravarthi, Amit P, Sathyaseelan, Soumya Sudipta	174
30	Analysis of Air Pollution by using Raspberry Pi-IoT Vijayakumar Sajjan, Pramod Sharma	178
31	Automation of Noise Detection using Internet of Things C. N. Vanitha, K. L. Sridhar, R. Dhivakar	184
32	Instant Facial Recognition of Criminals using a Smart Wearable Tech with Gesture Control from a IoT (Internet of Things) Cloud Database Rahul R, Ranga Priyan V, Shravan S, Ajjaiah H B M	190
33	Study of Design of IoT based Digital Board for Real Time Data Delivery on National Highway Chetan Dhule, Rahul Agrawal, Sanjay Dorle, Bhushan Vidhale	195
34	Security and privacy aspects for Internet of Things (IoT) Malti Bansal, Marshal Nanda, Md. Nazir Husain	199
35	Organ Simulation and Healthcare Services: An Application of IoT Malti Bansal, Tushar Chopra, Souradip Biswas	205
36	Designing IoT Based Posture Monitoring System Mritha Ramalingam, R. Puviarasi, Quah Chia Shern, Elanchezhian Chinnavan	209
37	IoT-based Cyber-Physical Additive Manufacturing Systems: A Secure Communication Architecture, Research Challenges and Directions Md Masud Rana, Narendra Dahotre	216

38	IoT based Smart Shoe for the Blind Teja Chava, A. Tarak Srinivas, A. Lohith Sai, Venubabu Rachapudi	220
39	Cloud based Smart Pantry System using IoT R. Pavithra, M. Karthiga, A. Hema, Bharathi Kannan, R. A. Madhumitha	224
40	Measurement, Control and Monitoring in Smart Grids Using NB-IoT Sudhir K. Routray, Devrajan Gopal, Arun Pallekonda, Abhishek Javali, Suneetha Kokkirigadda	229
41	IOT Based over Current Protection Control System using for Micro Grids Balachandra Pattanaik, Ararso Taye, Abdi Abayneh Umer, Henok G	235
42	Study of Automobile Safety Technology Development using Vehicular Safety Device (VSD) Tulasi Krishna Gannavaram V, Rahul Bejgam, Sai Bhatt Keshipeddi, Anusha Banda, Gayathri Bollu	240
43	Fuzzy Logic based Improvement of UPFC Performance in Power System Mayanka Roy, Anil Kumar Kori	245
44	Temperature & Humidity-Weighted-Modified GRNN based Prediction Model of Photovoltaic Power Generation Xiuxiu Cheng, Cuiyun Gao, Chong Hu, Jianpeng Xu	251
45	A Structured Krylov Subspace Approach based Model Reduction of Periodic Control System in Lifted Form Mohammad Sahadet Hossain, Muhtasim Alam Chowdhury, Md. Samiur Rahman	257
46	Design and Simulation of FinFET Circuits at Different Technologies Kajal, Vijay Kumar Sharma	263
47	Traffic Forecasting using Time-Series Analysis Mohammmd Asifur Rahman Shuvo, Muhtadi Zubair, Afsara Tahsin Purnota, Sarowar Hossain, Muhammad Iqbal Hossain	269
48	Integrated Vendor-Managed Time Efficient Application to Production of Inventory Systems Bickey Kumar Shah, Vansh Kedia, Rahul Kumar Jha	275
49	Operational Risk Informationization Evaluation Algorithm of China Southern Power Grid Company Limited Liang Zheheng, Jiang Daohuan, Zeng Jijun, Zhu Gongfeng	281
50	GA based PID controller: Design and Optimization Syed Inthiyaz, Rajesh Nalli, Rakesh T, K Subbarao, Sk. Hasane Ahammad, V Rajesh	285
51	A Hybrid True Random Number Generator using Ring Oscillator and Digital Clock Manager Sushant Tupparwar, Mohankumar N	290
52	Assessment of 3-Phase Photovoltaic Integrated UPQC for Load Unbalancing Condition Divya R. Dhagate, S. S. Dhamaal, M. P. Thakre	295
53	PAPR Reduction of OFDM Signal by Scrutiny of BER Assessment and SPS-SLM Method via AWGN Channel Ohidujjaman, Raihana Zannat, Tania Khatun, Mahfujur Rahman, Salim Raza, Mohammad Nurul Huda	301
54	Balanced Scan Chain Analysis to Improve Fault Coverage in VLSI Circuits Geethu Remadevi Somanathan, Ramesh Bhakthavathchalu, Krishnakumar M	307
55	Performance Analysis of Full Adder based on Domino Logic Technique Kamlesh Kukreti, Prashant Kumar, Shivangi Barthwal, Amit Juyal, Alankrita Joshi	312
56	The MATLAB/SIMULINK Implementation of a Single Zone Temperature Control Strategies Roxana-Elena Tudoroiu, Mohammed Zaheeruddin, Sorin Mihai Radu, Nicolae Tudoroiu	317
57	Performance Analysis of Frequency Variation System using Drives (VT240s and Axpert Eazy) for Industrial Application Kapil Jajulwar, Rahul Agrawal, Dhanajay Mehta	324

58	Stability Constrained Day Ahead Unit Commitment with Maximizations of Spinning Reserve for A PV Embedded Electric Grid Mohan Thakre, Yogesh Mahadik, Divya Dhagate	329
59	Modelling and Analysis of Magnetically Coupled Impedance Source Inverter for Solar Photovoltaic Systems Chandrashekhar Badachi, Pooja S Laad	335
60	Design and Smart Automation of Lunar and Martian Habitat using STM32H7 Microcontroller and LabView Suryaa Pranav Meduri, CH. N. P. V. Chandra Shekar, Anupama Meduri, Neha Diwan	340
61	A Study of Securing Healthcare Big Data using DNA Encoding based ECC Lipsa Nayak, V. Jayalakshmi	348
62	Low Power Dissipation of 14-bit Pipelined ADC with Operational Amplifier Narendra Kumar Patel, Sandeep Shukla, Abhishek Bhatt	353
63	High Performance Digital to Analog Converter using CMOS 45nm Technology David Solomon Raju Y, K Shyamala, Ch. Sumalatha, J. Sunilkumar	357
64	Overview on Various Aspects of Magnetization in Permanent Magnet Motors B. Ravisankar, N. Senthilnathan, P. Sethupathi	362
65	A Sub-threshold Low Noise Amplifier Design with an Emphasis on PVT Analysis Shivam Kumar, Sanchita, Thokala Harikrishna, Pranab K Dutta, Amit Jain	370
66	Analysis of Interleaved DC-DC Converter using ANFIS Control for EV Charging Applications Subhash Kumar Ram, Navjot Kumar, Brijendra Kumar Verma, Anand Abhishek, Rishi Ranjan, Sukumar Mishra, S. A. Akbar	374
67	Paper Mill Headbox Consistency Control System Design with Deadtime Compensation Sandeep Kumar Sunori, Abhijit Singh Bhakuni, Sudhanshu Maurya, Narendra Bisht, Pradeep Juneja	379
68	Design of Frequency Selective Sub Reflector S. Jyosna, L. Nageswara Rao, CH VRS Gopala Krishna	384
69	Designing of Controller for BLDC Driven Solar Water Pump Gaikwad Siddhi Chandrakant, S. K. Patil	390
70	Solar Energy Utilization for Domestic Lighting Archana K, Ranjitha R	394
71	Effects of Joule Heating on the Temperature-Voltage Relationship in Copper Bestley Joe S, Gomathi T, Marshiana D, Krishnamoorthy N R	400
72	Optimization of Energy and Area of a Randshift: Fault-Tolerant Technique using FPGA Design Flow SK. Afifa Farman, Chaitanya Duggineni, K. N. V Khasim, Hima Bindu Valiveti	404
73	Particle Swarm Optimizer Based Maximum Power Point Controller for the Photovoltaic System Rinku Scaria, R. Neela, Bos Mathew Jos	410
74	Detection of Singularity in the Cell Nucleus of Synovial Sarcoma using Wavelet Leaders P. Arunachalam, P. Venkatakrishnan, N. Janakiraman	418
75	Efficient Fault Isolation Method to Monitor Industrial Batch Processes Sumit Mohanty, J. Satheesh Kumar	426
76	IoT based Multi-point Pesticide Spraying Machine Swapna Choudhary, Kamlesh Kalbande, Nitin Dhote	432
77	Wireless Sensor Network based Advanced Metering Infrastructure and Roll Out Strategy Shyam Shankaran R, Logesh Rajendran	437
78	ICT enabled Early Warning Dissemination System for Disaster Management Logesh Rajendran, Shyam Shankaran R	443

79	EEG based Neural Correlates of Experience Usama Saleem, Ali Kumail, Muhammad Adil Raja, Junaid Akhtar, Conor Ryan	449
80	Design of Real-Time Intelligent Monitoring Network for Water Environment Ecological Restoration based on MCGS Jing Yu, Xiangyong Zhang	454
81	An Overview on High voltage direct current Transmission Projects in India Namra Joshi, Jaya Sharma	459
82	Data Analytics based Prescriptive Analytics for Selection of Lean Manufacturing System A. Mohammed Faisal, L. Karthigeyan	464
83	Design of Waveguide Transition based Six Port Turnstile Junction L. Nageswara Rao	467
84	Inferring Political Preference from Twitter Tweets Nisha P. Shetty, Daita Ravi Teja, Tummala Srinag Vinil, Swati Kanwal, Harsh Mutha, Akshita Bhargava	471
85	Cloud Computing Security Challenges, Threats and Vulnerabilities Manoj Kumar Sasubilli, Venkateswarlu R	476
86	A Machine Learning Technique for Identification of Plant Diseases in Leaves Deepa, Rashmi N, Chinmai Shetty	481
87	Parametric Study of Through Transmission Laser Welding using Particle Swarm Optimization Rituparna Ghosh	485
88	A Scheduling Optimization Algorithm based on Graph Theory and Simulated Annealing Xijun Lin, Qiang Lin, Yanwei Shang	492
89	Visualized Analysis of Tourism Big Data based on Real-Time Analysis and Complexity Measurement Ling Liu	497
90	Application Analysis of Intelligent Computer Software Online Guiding based on Virtual Reality Chuili Hu, Cuihua Li	501
91	Correlation Modeling of Intelligent Manufacturing Industry Upgrading and International Trade based on Deep Neural Network Pengwen Xiao, Guoping Li	505
92	RansomListener: Ransom Call Sound Investigation using LSTM and CNN Architectures Rafeed Rahman, Mehruz A Rahman, Shahriar Hossain, Sajid Hossain, Mostafijur Rahman Akhond, Muhammad Iqbal Hossain	509
93	Intelligent Hybrid Chatbot Solution for Archaeological Sites Tracking Navod Godewithana, Gayashan Kirindage	517
94	Automatic Database Index Tuning using Machine Learning Mounicasri Valavala, Wasim Alhamdani	523
95	Image Retrieval using Bag-of-Features for Lung Cancer Classification Shital D. Bhatt, Himanshu B. Soni	531
96	Enabling MapReduce based Parallel Computation in Smart Contracts Yash Muchhala, Harshit Singhania, Sahil Sheth, Kailas Devadkar	537
97	Minimum Jerk Trajectory Planning of PUMA560 with Intelligent Computation using ANN M Aruna Devi, C P S Prakash, Praveen D Jadhav, Prajwal S Hebbar, Mohammed Mohsin, S Krishna Shashank	544
98	Smart-Bot: An Innovative System Simplifying the Hectic Tasks in Cyclic Activities Ravi. Sri Hanisha, Palle. Sai Hemanth, Nori. Ramya Sirisha, Jonnalagadda. Surya Kiran	551
99	Attenuation of Human Bias in Artificial Intelligence: An Exploratory Approach Saad Ahmed, Saif Ali Athyaab, Shaik Abdul Muqtadeer	557

100	Gait based Human Identification through Intra-Class Variations Khaing Zar Chi Tun, Sai Maung Maung Zaw	564
101	Profanity Detection and Removal in Videos using Machine Learning Apoorva Chaudhari, Palak Davda, Monil Dand, Surekha Dholay	572
102	Car Traffic Sign Recognizer using Convolutional Neural Network CNN Abhay Lodhi, Sagar Singhal, Massoud Massoudi	577
103	Urban Sound Classification using CNN Massoud Massoudi, Siddhant Verma, Riddhima Jain	583
104	Smart Recommender System using Deep Learning Snehal R.Chavare, Chetan J. Awati, Suresh K. Shirgave	590
105	Automatic Speaker Recognition using Transfer Learning Approach of Deep Learning Models Sonal Ganvir, Nidhi Lal	595
106	Predicting Performance Analysis of Garments Women Working Status in Bangladesh using Machine Learning Approaches Maria Sultana Keya, Minhaz Uddin Emon, Himu Akter, Md. Al Mahmud Imran, Md. Kamrul Hassan, Mayen Uddin Mojumdark	602
107	A Speech Recognized Dynamic Word Cloud Visualization for Text Summarization Kayal Padmanandam, Sai Priya V D S Bheri, Laxmi Harshika Vegesna, Kalakuntla Sruthi	609
108	Computer Data Processing Mode in the era of Big Data: from Feature Analysis to Comprehensive Mining Jing Gao	614
109	Factorization Machine based Music Recommendation Approach Jagendra Singh, Mohammad Sajid	618
110	An Efficient Privacy-Preserving Data Publishing in Health Care Records with Multiple Sensitive Attributes Jayapradha. J, Prakash. M	623
111	DeepGrip: Cricket Bowling Delivery Detection with Superior CNN Architectures Rafeed Rahman, Mehruz A Rahman, Md. Saiful Islam, Mahady Hasan	630
112	Weiner Filter based Hough Transform and Wavelet Feature Extraction with Neural Network for Classifying Brain Tumor B. Deepa, M. G. Sumithra, R. Mahesh Kumar, M. Suriya	637
113	A Review on Advanced Detection Methods in Vehicle Traffic Scenes Myat Nyein Chan, Thuzar Tint	642
114	A Big Data Analytics Framework for the Integration of Heterogeneous Federated Data Centers Ishara Hewapathirana, Thushari Silva	650
115	Design of Authenticated Radio Frequency Identification based Electronic Voting Machine K Annapurna, V Chandrani, P Mounika, P Teja Sree	658
116	CNN based Optical Character Recognition and Applications Naragudem Sarika, Nageswararao Sirisala, Muni Sekhar Velpuru	666
117	Health Recommender System for Cervical Cancer Prognosis in Women Madhusree Kuanr, Puspanjali Mohapatra, Jayshree Piri	673
118	Portfolio Management using Beetle Swarm Optimization with Penalty Method Rahul Solanki, Janice Shah, Niti Shah, Sheetal Chaudhari	680
119	Otsu Thresholding based Image Fusion Framework using Contour-let Transform Sumanth Kumar Panguluri, Laavanya Mohan	686
120	e-Health Monitoring System with Diet and Fitness Recommendation using Machine Learning Divya Mogaveera, Vedant Mathur, Sagar Waghela	694
121	GA and PSO Based Spectrum Allotment in Cognitive Radio Networks A. Mounika yesaswini, K. Annapurna	701



122	Comparison of Different Machine Learning Algorithms for Detecting Bankruptcy Maria Sultana Keya, Himu Akter, Md. Atiqur Rahman, Md. Mahbobur Rahman, Minhaz Uddin Emon, Md. Sabab Zulfiker	705
123	Performance Analysis of Chronic Kidney Disease through Machine Learning Approaches Minhaz Uddin Emon, Al Mahmud Imran, Rakibul Islam, Maria Sultana Keya, Raihana Zannat, Ohidujjaman	713
124	A Neuromorphic Model for Image Recognition using SNN R. Kabilan, N. Muthukumaran	720
125	A Novel Full Reference-Image Quality Assessment (FR-IQA) for Adaptive Visual Perception Improvement D Narsaiah, R Surender Reddy, Aruna Kkkula, P Anil, A Karthik	726
126	Self-healing Fault Tolerance Technique in Cloud Datacenter R. Kanniga Devi, M. Muthukannan	731
127	Consuming E-Learning Twitter Data by Live Streaming Adlin Sheeba, Padmakala S, Uma Maheswari B, Ramya J	738
128	Similarity Score of Two Images using Different Measures Varshini Appana, Divya Shree, Himasri Kurra, Tulasi Manasa Guttikonda, Shahana Bano	741
129	Disease Detection in Fruits using Image Processing Malathy.S, Karthiga. R. R, Swetha.K, Preethi. G	747
130	Real-Time Vital Signs Monitoring System Towards Livestock Health Furtherance Ana Rita Reigones, Pedro D. Gaspar	753
131	Automatic Segmenting Technique of Brain Tumors with Convolutional Neural Networks in MRI Images Bhuvaneswari M	759
132	A Novel Deep Learning and Machine Learning Powered Approach for Image Forgery Detection N. Nanthini, S. Sasipriya, Santosh Kumar Sahoo, Balachandra Pattanaik, S. A. Sivakumar, B. Maruthi Shankar	765
133	Twitter Spam Detection using Naïve Bayes Classifier K. Ushasree Santoshi, S. Sree Bhavya, Y. Bhavya Sri, B. Venkateswarlu	773
134	Histopathology Image Classification for Soft Tissue Sarcoma in Limbs using Artificial Neural Networks P. Arunachalam, P. Venkatakrishnan, N. Janakiraman	778
135	Attention Mechanism and Feature Correction Fusion Model for Facial Expression Recognition Qihua Xu, Changlong Wang, Yi Hou	786
136	Road Surface Detection using FMCW 77GHz Automotive RADAR using MFCC Renuka Devi S M, Sudeepini D	794
137	A Comprehensive Study on Ensemble-based Imbalanced Data Classification Methods for Bankruptcy Data K. UlagaPriya, S. Pushpa	800
138	An Analysis of Audio Classification Techniques using Deep Learning Architectures Mohammed Safwat Imran, Afia Fahmida Rahman, Sifat Tanvir, Hamim Hassan Kadir, Junaid Iqbal, Moin Mostakim	805
139	Design and Development of Sewage Cleaning Mobile Robot Baluprithviraj. K. N, Madhan Mohan. M, Kalavathi Devi. T, Sakthivel. P	813
140	A Taxonomy and Survey on Energy-Aware Scientific Workflows Scheduling in Large-Scale Heterogeneous Architecture Sumit Kumar Saurav, Shajulin Benedict	820
141	Classification of Cervical Cancer Detection using Machine Learning Algorithms Aditya Arora, Anurag Tripathi, Anupama Bhan	827

142	Requirements Identification on Automated Medical Care with Appropriate Machine Learning Techniques Balajee R M, Hitesh Mohapatra, Deepak V, Vijendra Babu D	836
143	Encrypted Negative Password Identification Exploitation RSA Rule N. Raghavendra Sai, Tejaswi Cherukuri, Susmita B, Keerthana R, Anjali Y	841
144	ERP and Artificial Intelligence based Smart Financial Information System Data Analysis Framework Aile Dong	845
145	Bacterial Foraging Optimized Parameters for ANN using Adaptive Harris Hawks Weight Optimization Pedalanka P S Subhashini, Manchikalapudi Satya Sai Ram, Duggirala Sreenivasa Rao	849
146	An Efficient Social Spider Optimization Algorithm based Multi-Document Summarization Model R. Senthamizh Selvan, K. Arutchelvan	855
147	A Vision based Face Tracking using Camshift with BLBP Algorithm in Head Gesture Recognition System Suresh Salankar, Rushikesh Bankar	861
148	Recent Developments and Future Enhancements in Electronic Skin Anju Das, Saket Vaibhav	866
149	Smart Cities: Review of Characteristics, Composition, Challenges and Technologies Sonam Pathak, Manish Pandey	871
150	Analyzing the user Navigation Pattern from Web Logs using Maximum Frequent Pattern Approach Om Prakash P. G, Ananthakumaran S, Sathishkumar M, Ganeshan R	877
151	Critical Factors Influencing the Adoption of Cloud Computing in Indian Private Sector Organizations P. A. Selvaraj, M. Jagadeesan, Jayashree. B, Keerthana. M, Angunathan. K	884
152	VEHIA: Safety Enhancement of Non-Premium Vehicle Assisting System for Personal Vehicle users Vidushan Manamperi, Kavindu Liyaarachchi, Sadeepa Samaranayake, Vimukthi Fernando, Pradeep Abeygunawardhana, Rajitha de silva	892
153	Comparison of Sentiment Analysis and Domain Adaptation Techniques with Research Scopes Dipak Patel, Kiran Amin	900
154	A Flexible Access Control with user Revocation in Fog-Enabled Cloud Computing C. Nagarani, R. Kousalya	909
155	Heart Failure Prediction by Feature Ranking Analysis in Machine Learning Pushpavathi T P, Santhosh Kumari, Kubra N K	915
156	Hypertensive Retinopathy Screening through Fundus Images-A Review Dimple Nagpal, Surya Narayan Panda, Muthukumaran Malarvel	924
157	Enhanced Twitter bot Detection using Ensemble Machine Learning Hrushikesh Shukla, Nakshatra Jagtap, Balaji Patil	930
158	A Review of AI for Urban Planning: Towards Building Sustainable Smart Cities Avinash Kumar Jha, Awishkar Ghimire, Surendrabikram Thapa, Aryan Mani Jha, Ritu Raj	937
159	Extensive Review of Cloud based Internet of Things Architecture and Current Trends Eisha Akanksha, Aritri Debnath, Barnali Dey	945
160	A Novel Content-based Recommendation Approach based on LDA Topic Modeling for Literature Recommendation Dhiraj Vaibhav Bagul, Sunita Barve	954
161	Lung Nodule Detection through CT Scan Images and DNN Models Vinisha Vimal Kumar Shukla, Maturi Tannisha, Roshini Aluru, Bhaswanth Nagiseti, Praveen Tumuluru	962

162	Applications of IoT and Artificial Intelligence in Water Quality Monitoring and Prediction: A Review Hauwa Mohammed Mustafa, Gasim Hayder, Aisha Mustapha, Abdullahi Salisu	968
163	Intention to use Governmental Micro Video in the Pandemic of Covid-19: An Empirical Study of Governmental Tik Tok in China Yonghan Zhu, Jinghao Dong, Xing Qi, Jie Deng	976
164	Experimental Analysis using Deep Learning Techniques for Safety and Riskless Transport - A Sustainable Mobility Environment for Post Covid-19 D. Selvakarthi, D. Sivabalaselvamani, S. Ashwath, A. P. Aswin Kalaivanan, K. Manikandan, C. Pradeep	980
165	Opinion Mining based Fake Product Review Monitoring and Removal System Syed Mohammed Anas, Santoshi Kumari	985
166	Predicting the Stages of Diabetic Retinopathy using Deep Learning Chava Harshitha, Alla Asha, Jangala Lakshmi Sai Pushkala, Rayapudi Naga Swetha Anogini, Karthikeyan C	989
167	Prediction of Epidemic Outbreak using Deep Learning Methods Chintala Ram Sai Kiran, Chinthoti Naveen, Digumarthi Anil Kumar, Thotakura Saiteja, Karthikeyan C	995
168	A Review On Indian State/City Covid-19 Cases Outbreak Forecast utilizing Machine Learning Models Sheshang Degadwala, Brijesh Patel, Dhairya Vyas	1001
169	Internet of Things (IoT) based Assistive Devices Malti Bansal, Samarth Garg	1006
170	Forecasting by Machine Learning Techniques and Econometrics: A Review G. Shobana, K. Umamaheswari	1010
171	Research on Optimization of Car-hailing Driving Route based on Short-term Traffic Speed Yang Ruotong, Jiayi Yao, Qian Lin	1017
172	Information Acquisition Chatbot System using LUIS V. Prathyusha, G. Likhitha Sri, G. Meenakshi, Y. Kalyan Chakravarti	1025
173	Real Time Sentimental Analysis on Twitter Sai Madhu K, Chakradhar Reddy B, Damarukanadhan CH, Polireddy M, N. Ravinder	1030
174	Object Detection and Tracking for Video Surveillance Gayatri Sasi Rekha Machiraju, K. Aruna Kumari, Shaikh Khadar Sharif	1035
175	Comparison of Deep Learning Approaches for Sentiment Classification K. S. Kalaivani, S. Uma, C. S. Kanimozhiselvi	1043
176	Performance Analysis of Diabetic Retinopathy Prediction using Machine Learning Models Minhaz Uddin Emon, Raihana Zannat, Tania Khatun, Mahfujur Rahman, Maria Sultana Keya, Ohidujjaman	1048
177	Attentiveness Measure in Classroom Environment using Face Detection Rahul kumar pandey, Ayaz Ahmed Faridi, Gyanesh Shrivastava	1053
178	Smart Irrigation System for the Reinforcement of Precision Agriculture using Prediction Algorithm (SVR based smart irrigation) VVSS Sirisha, G. Sahitya	1059
179	Novel Supervised Machine Learning Classification Technique for Improve Accuracy of Multi-Valued Datasets in Agriculture Akansha Agrawal, Mayank Patel, Ajay Kumar Sharma	1067
180	Implementation of Grey Scale Normalization in Machine Learning & Artificial Intelligence for Bioinformatics using Convolutional Neural Networks Divya Kothari, Mayank Patel, Ajay Kumar Sharma	1071

181	Usage of Massive Open Online Course to Motivate Student in Learning Dwi Listriana Kusumastuti, Viany Utami Tjhin	1075
182	Software Defined Device to Device Communication Handover- Latest Advancements Hima Bindu Valiveti, Chaitanya Duggineni	1079
183	Face Mask Detection by using Optimistic Convolutional Neural Network Suresh K, Palangappa MB, Bhuvan S	1084
184	Anti-Spoofing Door Lock using Face Recognition and Blink Detection Romit Ganjoo, Anjali Purohit	1090
185	Improved Hierarchical Clustering Method based on Particle Swarm Intelligence for Improving the Network Lifetime in Underwater Communication Network Sandhiyadevi. P, Mohanapriya. G. K, Ragavi. B, Pavithra. L, Nandhini. V. D, Dhaarani. S	1097
186	Determination of Soil Moisture Content using Image Processing -A Survey A. Stephen Sagayaraj, S.K. Kabilesh, D. Mohanapriya, A. Anandkumar	1101
187	Hybrid Machine Learning Classification Technique for Improve Accuracy of Heart Disease Ajay Maru, Ajay Kumar Sharma, Mayank Patel	1107
188	Real-Time Panorama And Image Stitching With Surf-Sift Features Sheshang Degadwala, Utsho Chakraborty, Promise Kuri, Haimanti Biswas, Ahmed Nur Ali, Dhairya Vyas	1111
189	Performance Comparison of Intrusion Detection System using Three Different Machine Learning Algorithms Zena Khalid Ibrahim, Mohammed Younis Thanon	1116
190	GuidoBot : A Novel Approach for Assisting Faculty in Tracking Goals and finding tasks Nagothu. Srujan, Utlapalli. Mahesh, Vemuri. Poojitha, Syam. Jason, Jonnalagadda. Surya Kiran	1125
191	A Framework for Context-Aware Query Processing Romani Farid Ibrahim	1133
192	Enhanced the Data Hiding in Geometrical image using stego-Crypto Techniques with Machine Learning B. Barani Sundaram, Sudhanshu Maurya, P. Karthika, P. Vidhya Saraswathi	1141
193	A Distributed Multithreaded Evolutionary Computing Frame Work using Differential Evolution Algorithm Raghul S, Jeyakumar G	1145
194	Real-Time Optimization of School Bus Routing Problem in Smart Cities Using Genetic Algorithm Mehmet Ozmen, Hasan Sahin	1152
195	Malicious Node Detection in Vanet using Fuzzy Clustering Technique Kanthimathi N, Saranya N, Roshini Roy J, Lakshmipriya S, Santhya	1159
196	A Comparative Analysis of Query-Constrained Video Summarization Techniques Anil Singh Parihar, Priyansh Verma, Prashansa Bhattacharyya, Rohit Goyal	1165
197	Mask-GradCAM: Object Identification and Localization of Visual Presentation for Deep Convolutional Network X. Alphonse Inbaraj, Jyh-Horng Jeng	1171
198	Summarizing & Sentiment Analysis on Movie Critics Data Soma Sekhar Vavilapalli, Saikiran Saggam, Prakash ReddyKorepu, Manoj Pentyala, S Anjali Devi	1179
199	Predicting Stock Prices using Machine Learning Techniques Karthikeyan C, Sahaya Anselin Nisha A, Anandan P, Prabha R, Mohan D, Vijendrababu D	1184
200	Transfer Learning Approach for Diabetic Retinopathy Detection using Residual Network R.S.Rajkumar, Divi Ragul, T Jagathishkumar, A. Grace Selvarani	1189

201	Data Mining based BIM Technology in Tunnel Construction Simulation Modeling Wanbo Qu	1194
202	Convolutional network based Animal Recognition using YOLO and Darknet B. Karthikeya Reddy, Shahana Bano, G. Greeshmanth Reddy, Rakesh Kommineni, P. Yaswanth Reddy	1198
203	Reinforcement learning based an Integrated Approach for Uncertainty Scheduling in Adaptive Environments using MARL Chathurangi Shyalika, Thushari Silva	1204
204	Modern E-Learning based Information and Communication Technologies (ICT) as a Part of Teaching Process Ing. Milan Štrbo	1212
205	Management of Major Postpartum Haemorrhage by using Zigbee protocol – A Review S. V. Ruphitha, V. D. Ambeth Kumar	1219
206	Recurrent Neural network based Text Summarization Techniques by Word Sequence Generation R. Subha Shini, V. D. Ambeth Kumar	1224
207	Healthcare Management of Major Cardiovascular Disease-A review M. Indhumathi, VD.Ambeth kumar	1230
208	Deep Learning based Face Mask Recognition System -A Review Hari Priya K, Malathi. S	1236
209	Study on Supply Chain Management using Blockchain Technology Yaswanth Raj, Sowmiya B	1243
210	Blockchain based Smart Contracts in Automation of Shipping Ports Sangeerth P S, Lakshmy K V	1248
211	K-Means Clustering of Ambient Air Quality Data of Uttarakhand, India during Lockdown Period of Covid-19 Pandemic Sandeep Kumar Sunori, Pushpa Bhakuni Negi, Sudhanshu Maurya, Anita Rana, Pradeep Juneja, Bhawana	1254
212	Pattern Recognition based Tasks and Achievements on Handwritten Bengali Character Recognition Apash Roy, Debayani Ghosh	1260
213	State of the Art of ICT based Telemedicine and E-health Services in Bangladesh Mafizur Rahman, Sumita Das, Malika Zannat Tazim, Masud Rana, Rashedul Amin Tuhin, Amit Kumar Das	1266
214	CNN based Security issues of the Drivers of Ridesharing Services in Bangladesh Jannatul Ferdous Sorna, Md. Momtaz Uddin Rashel, Rashedul Amin Tuhin, Amit Kumar Das	1273
215	An Analysis and Forecasting of Covid-19 Spread in Tamil Nadu based on additive model for non-linear pattern Kanimozhi Selvi, C. S Kalaivani K. S, Abinayaa S. K. C	1279
216	Arduino based Smart Irrigation System for Home Gardening Kailasam Selvaraj, Iswarya M, Ramyasri S, Anu Keerthika M S	1284
217	Hydroxyurea Dosage Classification for Sickle Cell Disease Patients Bikesh Kumar Singh, Hardik Thakkar	1289
218	Time Series Analysis based Tamilnadu Monsoon Rainfall Prediction using Seasonal ARIMA U. Ashwini, K. Kalaivani, K. Ulagapriya, A. Saritha	1293
219	IoT based Smart Cradle for Baby Monitoring System N Lakshman Pratap, K Anuroop, P Nirmala Devi, A Sandeep, Sunanda Nalajala	1298
220	Case Study on well-known Topic Modeling Methods for Document Classification Süleyman Özdemirci, Metin Turan	1304

221	Natural Language Processing (NLP) based Text Summarization - A Survey Ishitva Awasthi, Kuntal Gupta, Prabjot Singh Bhogal, Sahejpreet Singh Anand, Piyush Kumar Soni	1310
222	Wireless Networks analysis based on Graphs with Equal and Strong Proper Connection Number I. Annammal Arputhamary, D. Angel	1318
223	OPNN: Optimized Probabilistic Neural Network based Automatic Detection of Maize Plant Disease Detection Eisha Akanksha, Neeraj Sharma, Kamal Gulati	1322
224	Heart Disease Prediction using Hybrid machine learning model M. Kavitha, G. Ganeswar, R. Dinesh, Y. Rohith Sai, R. Sai Suraj	1329
225	Machine learning based mechanism for crowd mobilization and control K. Suganeswaran, N. Nithyavathy, S. Arunkumar, K. Dhileephan, P. Ganeshan, Alwin J Antony	1334
226	Comparison of ECC and RSA Algorithm with DNA Encoding for IoT Security Malti Bansal, Shubham Gupta, Siddhant Mathur	1340