

2022 International Conference on Automation, Computing and Renewable Systems (ICACRS 2022)

**Pudukkottai, India
13-15 December 2022**

Pages 1-735



**IEEE Catalog Number: CFP22CB5-POD
ISBN: 978-1-6654-6085-9**

**Copyright © 2022 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:	CFP22CB5-POD
ISBN (Print-On-Demand):	978-1-6654-6085-9
ISBN (Online):	978-1-6654-6084-2

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

International Conference on
Automation, Computing and Renewable Systems
ICACRS 2022
Table of Contents

S. No	Paper Title/ Author Name	Page. No
1	Optically Controlled Microwave Sensor for Biomedical Applications Maryam Sami Majeed, Mesut ÇEVİK	1
2	Bandwidth and Power Cost Optimized Over Visible Light Communication Karpagam. M, Sowmya. K	5
3	Analysis of RLC Network Connected to Steady Stimulating Source via Gupta Transform Rohit Gupta, Rahul Gupta, Loveneesh Talwar, Anamika, Dinesh Verma	9
4	Robotic Arm Aided Thermal Screening System Usha Rani C M, K Shailaja, Raksha C, Harisha H L, Prashanth P	13
5	Recent Advancement and Comparative Turnouts of 1Ø Grid Tied Non-Isolated Inverters Topologies Rushikesh S. Shahakar, Kawita D. Thakur, Nutan S. Thakare	19
6	An Automated System for Arrhythmia Detection using ECG Records from MITDB Gilbert Roland, Dhana Sony. J, S. N. Padhi, S. Kayalvili, S Cloudin, Ashok Kumar	26
7	A Multicore ECU-based Automotive Software Domain Combining Runnable Sequencing and Task Scheduling K. Suganyadevi, V. Nandhalal, N. Thiyagarajan, S. Dhanasekaran	34
8	Analysis of Coagulation Effect in Veins using MEMS Laminar Flow for Early Heart Stroke Detection T. Vasudeva Reddy, R. Anirudh Reddy, P. Kavitha Reddy, Anisha Reddy	39
9	Reviewing the Role of Fiber Bragg Grating Temperature Sensors in Smart Factories: Opportunities and Challenges Paul Stone Macheso, Mohssin Zekriti	45
10	IoT-based Intelligent Mobile Application for Shopping M. Balamurugan, G. Prabhakar, G. Amsaveni, M. Karthikumar, J. Jasmin Shifa, E. Sharmila	50
11	Noval Approach to Non-Invasive Blood Glucose Monitoring based on Visible Laser Light Joel T, Sakthipriya R, Reena J, A Poojha	54
12	A Survey on MQTT Bridges, Challenges and its Solutions V. Thirupathi, K. Sagar	58
13	Dynamic Pagerank Frequent Subgraph Mining by GraphX in the Distributed System Sadhana Priyadarshini, Sireesha Rodda	63
14	Prediction of Solar Energy using Time Series Methods Sakshi Shukla, Sarita Sheoran, Sumanta Pasari	72
15	A Novel MPPT Approach for a Grid Tied Wind Energy System D. Ravi Kishore, B. Kavya Santhoshi, K. Sravani, Kalpaguri Maruthi	77

16	Design and Implemetation of Combinational Logic Circuits using Open Source Tool N. Divya, G. Ilakkiya, M. Dheeraj, R. Hinduja, M. Gokul Nathan, M. Harish	82
17	Architectural Designs and Performance Analysis of Adiabatic-based 6T, 9T, and 12T SRAM Cells Parvathi M	88
18	Design and Development of Neuro-Fuzzy based Multi-Level Inverter using FPGA Ameer Ahamed Z, Anuj Jain, V. K Sharma	93
19	Fuzzy Logic Controlled SEPIC with Coupled Inductor-based Converter for High Voltage Applications D. Kirubakaran, S. Gomathi, T. Kavitha, M. Sai Silvy, P. Rajeshwari, T. D. Subha	101
20	Optimal Siting and Sizing of Dispersed Generation in Electrical Distribution Network with PSO Aishwarya M. Holi, Shubham B. Kattikar, Mihir V. Patel, Rudresh B. Magadam, Santosh M. Nejar	108
21	A Study of Genealogy and Tracking Systems for Automotive Manufacturing Industries Akhil Thomas, Arvind A R, Angelina Geetha	112
22	A Generic Algorithm for Controlling an Eyeball-based Cursor System Praveena Narayanan, Sri Harsha. N, Sai Rupesh. G, Sunil Kumar Reddy, Rupesh. S, Yeswanth. M	117
23	A Hybrid Optimizer based Nonlinear Model Predictive Control for Rotary Inverted Pendulum Supriya P. Diwan, Shraddha S. Deshpande	121
24	Interactive Performance Indicator Dashboard for Modern Enterprise Vidya Dharani L, Manikanta K, Grace Anzel G, Sasi Kiran V, Srithar S, Aravinth S S	128
25	Switching and Morphological Studies on Si 15 Te 80 Cu 5 Glass and Thin Film Diptoshi Roy, Chandasree Das	134
26	Performance Analysis of Slotted Microstrip Antenna with Variant Substrates R Gayathri, T Perarasi, M Leeban Moses, P Ramya	139
27	Overview on Battery Management System and Energy Storage System of Electric Vehicle Sanitha Michail C, Chithra M, Nithara P V, Reshma P Eldho	143
28	Enhanced Vehicle Plate Identification using YOLO Gayana M N, Alonie Jane Crasta, Shreenath Acharya, Carol Dsouza, Divya Cheryl Moras, Karvender Singh	148
29	Exploratory Analysis on Geo-Locational Data S. Ravi Kishan, Krishna Sahithi Kakunuri, Akshitha Raj Parasa, Vamsipriya Patlolla, Prathap Gamini	153
30	Distance Estimation for Collision Avoidance of Micro Aerial Vehicles using LiDAR Sensor Hemanth Verma Pinnamaraju, Prashanth Reddy Kapu, Adi Narayana Juturu, Anbarasu B	157
31	Low Power, Highly Stable and Enhanced Read Speed 7T SRAM Deberjeet Usham, Malti Bansal	162

32	Simulation of Flight Trajectories of Quadrotor using MATLAB and Simulink Akash S, B. Anbarasu	168
33	Effectual Home Automation using ESP32 NodeMCU R. Niranjana, Arvind S, Vignesh M, Vishaal S	173
34	Design and Analysis of a Meta Material based Nested Circular Split Ring Resonator for Terahertz Applications Swathi Dasi, Swathi Dasi, G Manmadha Rao	178
35	Wheat Head Detection using YOLO: A Comparative Study Neeraj S Kumar, Stephi S, Meenakshi R, Greeshma Sarath	182
36	Comparison between Symmetrical and Asymmetrical 13 Level MLI with Minimal Switches Sindhuja R, Padma S, Parimalasundar E, Suresh K	187
37	Development of Hardware Prototype and Testing of Short Transmission Line V. Johsna, V Harshith Varma, Reddi Vivek Vardhan, Sailaja V, K Deepa, Manitha PV	192
38	A Review of Dynamic Wireless Power Transfer System Technology used in Solar Wireless Electric Vehicle Charging Stations Vinoth Kumar K, Maruthi B, Rahul R, Santhosh Melvin D, Sathish S	198
39	Hardware Integration of Sensors for Automating Smart Homes C. Lasya, N. Madhav Sai, N. Gunavardhan Reddy, N. Manoj Reddy, Lekshmi S, Syama S	202
40	Analyzing the Effects of Electric Mobility Charging Harmonics on Power Grid Nishant Sharma, Akshay Dhiman, O. P Rahi	207
41	Optimal Placement of Electric Vehicle Charging Station by Considering Dynamic Loads in Radial Distribution Systems Dandu Srinivas, M. Ramasekhara Reddy	212
42	Performance Enhancement of Kesterite $Cu_2ZnSn(S,Se)$ 4 Thin Film Solar Cell Satyendra Kumar, Swati Arora	218
43	EEG Signal -based Epileptic Seizure Detection Gokul M, Jagasri L, Sindhuja M, Barkavi R, Pradeep Murugesan, Arun Prasath T	223
44	Robustness Trend of Power Transmission and Transformation Monitoring System based on Multidimensional Data Anomaly Detection Algorithm Wei Zhang, Yubo Zhang, Chengwei Huang, Yubin Feng	229
45	Miniaturized Semi Hexagonal Aperture Shape Antenna with Elliptical Ground for C – V2X Communication Ramya Vasudevan, Nagaraju V	233
46	Smart Water Flow Monitoring and Theft Detection System using IoT Varakumari Samudrala, Ajay Reddy Yeruva, Jayapal N, T. Vijayakumar, M. Rajkumar, Shaik Razia	239
47	IoT based Solar Technology Monitoring and Cleaning System H. Vidhya, U. Akshaya, M. G. Keerthana, T. Dhivyanandhini	246
48	Ensuring Safety for School Children using IoT Daniel NareshKumar. M, Aneeshraj P B, Balaji A, Doguparthy Dhanush	251
49	IoT and Artificial Intelligence-based Low-Cost Smart Modules for Smart Irrigation Systems V. Anand Kumar, A. Renaldo Maximus, S. Vishnupriyan, K. Sheikdavood, P. Gomathi	254

50	Designing and Implementation of Cellular Network based LPG Monitoring and Alert System S. Ramalingam, B. Sakthi Kumar, K. Prabhu, C P. Prashanth, E. Petersam	261
51	A Comparative Study on Machine Learning based Cross Layer Security in Internet of Things (IoT) K. Saranya, A. Valarmathi	267
52	Currency and Fake Currency Detection using Machine Learning and Image Processing-An Application for Blind People using Android Studio Vaishak B, Hoysala S, Pavankumar V H, Mohana	274
53	Recent Advancements of Internet of Medical Things (IoMT): Challenges and Future Opportunities with Emerging Technologies Divy Tushar Shah, Akash Patel, Aishwariya Budhrani, Khushi Patel	278
54	Solar Tree based Smart City Street Light Control System using IoT BLYNK Platform S. Dhanasekaran, P. Gomathi, A. Renaldo Maximus, Thiyagarajan Krishnan, B. Kannan	284
55	IoT and Image Processing based Smart Door Locking System B Jayaram, D. Abdus Subhahan, Sakthivel B, T. A. Mohanaprakash, Sunita Joshi, M Jogendra Kumar	291
56	Smart Blind Stick for Visually Impaired People using IoT Rajanish Kumar Kaushal, K. Tamilarasi, P. Babu, T. A. Mohanaprakash, S. E. Murthy, M Jogendra Kumar	296
57	Implementation of a Smart Garbage Monitoring System using GSM B. Rubini, S. Pradeep Kumar, M. Suganiya	301
58	Android based Integrated Parking System for Real-Time Parking Raji C.G, Adil Bin Aboobacker, Anfas Muhammad, Jamshidha K, Jishana SHEMEEM	304
59	IoT-based Automatic Manhole Observant for Sewage Worker's Safety Rakesh Dronavalli, Kalpana Seelam, Parthive Maganti, Jasmitha Gowineni, Sai Deepthi Challamalla	310
60	Municipality Water Management System using IoT Perumal. B, Nagaraj. P, Esakki Raja. S, Jaya Sunthari. S, Keerthana. S, Muthukumar. M. V	317
61	Random Forest , DT and SVM Machine Learning Classifiers for Seed with Advanced WSN Sensor Node Sachin D. Shingade, Rohini Prashant Mudhalwadkar, Komal M. Masal	321
62	Misbehaviour Detection based on Least Square Twin Support Vector Machine in VANETs H Summia Parveen, S. V. Evangelin Sonia	327
63	Issues and Future Challenges of Sentiment Analysis for Social Networks- A Survey R. Geethanjali, A. Valarmathi	332
64	Location based 5G Transmission for LEO Satellite Communication using BPAM Technique Sivasakthi T, Barath Narayanan R, Palani U, Vasanthi D, Preethi R, Pooja M	340
65	Detection of Selfish Nodes based on Node Energy in Mobile Adhoc Networks – MANETs R. Sarumathi, V. Jayalakshmi	346

66	A Review on Energy Efficient Cooperative Routing Algorithm for Wireless Sensor Networks Immanuvel Arokia James K, Manjula P, Mohana M, Arthi S	351
67	Impact of Power, Distance and Channel Conditions on the Throughput of Infrastructure and Adhoc Wi-Fi Networks ManasaPriya K, Chaitanya G, Mubeena Sk, Jahnvi K, Seetha Ramanjaneyulu B, Gangaprasad G	359
68	Towards Internet of Things: Integration of Wireless Sensor Network to Cloud Services for Data Collection and Sharing Anil Kumar N, S. Vijayalakshmi, D. Baswaraj, Padmanayaki Selvarajan, S. Chandramohan, Mohit Tiwari	363
69	Modified Aquila Optimization based Route Planning Model for Unmanned Aerial Vehicles Networks Sachin Vasant Chaudhari, Shahnawaz Ayoub, M. Siva, M. Dhipa, B Gayathri, V. Banupriya	370
70	Performance Analysis M-PAPM WDM-PON System with ASE-Powered Stealth Channels for Steganography Applications A. Sagaya Selvaraj, Mathibalan. B, Sagadevan K, Mohanraj S	376
71	Detection of Distributed Denial of Service Attack using Random Forest Algorithm Murukesh C, Kishore Kannan B, Thilak kumar A, Venkat B, Haris kumar V	382
72	Digital Data Protection using Barcode & Steganographic Approach Ayushi Chaudhary, Ashish Sharma, Neeraj Gupta	387
73	Blockchain based Healthcare Data Management Karthigha M, Padmavathy C, V. S. Akshaya	392
74	Intruder Detection System for Digital Device using Computer Vision Sugantha Mallika S. S, Priyadharsini. M, Venkat Kumar. I. S, Sudharsan. R, Surya. M	397
75	Detection of Attacks using Attention-based Conv-LSTM and Bi-LSTM in Industrial Internet of Things Bebin Josey T, D. S. Misbha	402
76	Design of Hybrid Authentication Protocol for High Secure Applications in Cloud Environments Sai Srinivas Vellela, R. Balamanigandan	408
77	A Randomized Dot Pattern Character Encoding Scheme (R-DPCES) for Steganography Susmita Mahato	415
78	Usage of Classifier Ensemble for Security Enrichment in IDS Ch. Phaneendra Varma, G. Ramesh Babu, Pokkuluri Kiran Sree, N. Raghavendra Sai	420
79	Optimal Installation for Enhancing Power System Security using Integrated BBO-PSO techniques K. Kavitha	426
80	Comparative Stratification of Steganalysis Techniques to Interpret & Target Anomalies Dhiren Dommeti, Siva Ramakrishna Nallapati, Venkata Vara Prasad Padyala, Venkata Naresh Mandhala	433

81	Implementation of Technology to Recognize Segmented and Non-Segmented Text: A Survey Sandhya Sharma, Sheifali Gupta, Avinash Sharma, Lipika Gupta, Shaminder Kaur	439
82	Attribute based Encryption in Healthcare Application Suresh Kumar S, Chidambaram G, S. Vijayalakshmi, Dhayanandh AT	443
83	Data Privatization and Security using Bit Plane Complexity Segmentation Suresh Kumar S, Chidambaram G, S. Vijayalakshmi	451
84	Design and Security Analysis of Isoidentity based Isobeta Cryptosystem Nilesh Bhosale, Rupesh Pohane, Siddhant Meshram, Akshaykumar Meshram, Malabika Adak, K. T. V. Reddy	459
85	Privacy Preserving Encryption with Optimal Key Generation Technique on Deduplication for Cloud Computing Environment Sanjeeva Polepaka, Shahnawaz Ayoub, Yudhveer Singh Moudgil, B Gayathri, Himanshu Sharma, S Kannan	464
86	A Comprehensive Survey on Cloud Security Mechanisms Dhwani Hakani, Palvinder Singh Mann	471
87	SEHAT: Cloud-based User Sociable Health Care Assistant System Sk. Arshiya Sultana, D. Igna Sree, Ch. Rupa, G. Sowmya Sree	476
88	Task Scheduling Algorithms in Fog Computing: A Comparison and Analysis Tarun Jagadish, Onkar Apte, K. Pradeep	483
89	Identify Fake Data or Misinformation in Near Real-Time using Big Data and Sentiment Analytics Parth M Kansara, Kinjal U Adhvaryu	489
90	Effective Intrusion Detection and Classification using Fuzzy Rule based Classifier in Cloud Environment C. Veena, S. Ramalakshmi, V. Bhoopathy, Minakshi Dattatraya Bhosale, C. G. Magadam, Abirami. S. K	497
91	A Comprehensive Review of Cloud based Multi-Authority Revocable CPABE Schemes Shobha Chawla, Neha Gupta	503
92	Mantaray Foraging Optimization based Makespan Enhancement in Cloud based Scheduling Environment Aswini. J, K. Johny Elma, P. John Augustine, N. Kopperundeivi, S. M. Chithra, T. Parasuraman	508
93	A Novel Deep Learning Mechanism for Workload Balancing in Fog Computing Maganti Venkatesh, S Naveen Kumar Polisetty, Srilakshmi.CH, PraveenKumar. K, Rabinarayan Satpathy, P. Neelima	515
94	Qos-Aware Video Streaming based Admission Control and Scheduling for Video Transcoding in Cloud Computing Venkateswara Reddy B, Khader Basha Sk, Roja D	520
95	Soft Computing based Machine Learning Techniques for Optical Communication Networks P. Malini, A. Vasantharaj, S. Preethi, S. Karpakam, U. Sasikala, S. Irfan basha	526
96	Spot Fire: An Intelligent Forest Fire Detection System Design with Machine Learning K. Revathi, T. Tamilselvi, R. Arunkumar, T. Divya	532
97	PDF Malware Detection System based on Machine Learning Algorithm Pruthvi Priya P M, Hemavathi P	538

98	A Deep Learning Approach to Analyze Diabetic Retinopathy Lesions using Scant Data Devendra Singh, Dinesh C. Dobhal, Saurabh Pargaian, Amrita Verma Pargaian, Janmejy Pant, Himanshu Pant	543
99	Comparison of Machine Learning Algorithms for Pigment Epithelial Detachment Classification using Shape and Curvature Features T. M. Sheeba, S. Albert Antony Raj, M. Anand	550
100	Deep Learning Network for Object Detection Under the Poor Lighting Condition Chethan L S, S. Uma Maheswari, Seeram Srinivasa Rao, Naveen Mukkapati, C. S. Sundar Ganesh, Ashok Kumar	555
101	ML based Parkinson's Disease Identification using Gait Parameters Lokaiah Pullagura, Nilofer Kittad, G. Diwakar, V. Sathiya, Ashok Kumar, Mrutyunjaya S Yalawar	561
102	A Brief Analysis on Machine Learning Classifiers for Intrusion Detection to Enhance Network Security Spandana Mande, Nandhakumar Ramachandran, Chanumolu Kiran Kumar, Ch Naga Priyanka	567
103	A Brief Review on Melanoma Diagnosis Models using Machine Learning Techniques Deepthi Rapeti, D Vivekananda Reddy	574
104	Equilibrium Optimizer with Deep Learning Model for Autism Spectral Disorder Classification A. Praveena, T. S. Karthik, Vijayakrishna Rapaka E, N. Senthamilarasi, Abirami. S. K, Shyamali Das	582
105	Automated Intracranial Haemorrhage Detection and Classification using Rider Optimization with Deep Learning Model T. S. Karthik, N K Anushkannan, Vijayakrishna Rapaka E, Naziya Hussain, Rajasekhar Pinnamaneni, Shyamali Das	588
106	Heart Disease Prediction and Classification using Machine Learning and Transfer Learning Model R Sivaprasad, M. Hema, Bharati N Ganar, Sunil D M, Vaishali Mehta, Mochammad Fahlevi	595
107	Convolutional Neural Networks (CNN) based Marine Species Identification Nanthini. N, Arul Siva Kumaran K, Ashiq A, Aakash V S, Bhuvaneshwaran M J	602
108	Review of Machine Learning Algorithms for Autism Spectrum Disorder Prediction V. Kavitha, R. Siva	608
109	Detection of Traffic on the Network based on a Real Dataset for the IIM Method and ML-TSDS Algorithm Sugin S.V, M. Kanchana	614
110	A Machine Learning based Approach for Breast Cancer Prediction Mayank Agrawal, Vinod Jain	623
111	Covid-19 Infection Segmentation using Deep Learning Techniques Arya R, Deepak S	627
112	Machine Learning Techniques for Detecting DDoS Attacks in SDN M. Kavitha, M. Suganthy, Aniket Biswas, R. Srinivsan, R. Kavitha, A. Rathesh	634

113	Retinal Fundus Image Retrieval and Classification using Optimal Deep Learning Model S Syed Mahamood Shazuli, A. Saravanan	639
114	Social Distancing Monitoring and Alerting System using YOLO Deep Learning Algorithm P. Dharani Devi, M. Thirukumar, B. Balaji	646
115	Breast Cancer Segmentation by K-Means and Classification by Machine Learning K. Priya, V. Senthilkumar, Samson Isaac. J, Sreekanth Kottu, V S Ramakrishna, M Jogendra Kumar	651
116	An Examen of Oral Carcinoma using Machine Learning Approaches Jenifer Blessy. J, Sornam.M	657
117	MiMi: Sinhala Language Speech Assistive Learning Bot to Support Children with Stuttering K. C. D Vithana, D. N. N Weerathne, H. A. S Krishan, M. R. M Wijesiri, Samantha Thelijagoda, J. A. D. T Jayawickrama, Nethmini T. Weerawarna	662
118	An Extensive Review of Machine Learning Techniques for EEG Signal Processing Anita. M, A. Meena Kowshalya, B. Maheswari, A. Muthuram	669
119	Hybrid Machine Learning based False Data Injection Attack Detection and Mitigation Model for Waste Water Treatment Plant A. Parvathy, G. Leela Kasyap, D. Venkata Abhinav, A. N. V. Surya Sai, R. Sriranjani, N. Hemavathi	674
120	Twitter Sentiment Analysis with Machine Learning M. Jagadeesan, T. M. Saravanan, P. A. Selvaraj, U. Asif Ali, J. Arunsivaraj, S. Balasubramanian	681
121	Hybrid Particle Swarm Optimization with Deep Learning Driven Sarcasm Detection on Social Media J. Anitha Josephine, Md. Abul Ala Walid, Mohammad Shabbir Alam, Santosh Kumar Maharana, Thulasimani T, Mohit Tiwari	687
122	Design of Kernel Extreme Learning Machine based Intelligent Crop Yield Prediction Model Srilatha Toomula, Sudha Pelluri	694
123	Reliable Densely Connected Network with Machine Learning based Diabetic Retinopathy Grading Approach Srinivasulu Sirisala, Nihar Ranjan Behera, D. Amuthaguka, Sachin Vasant Chaudhari, Jhakeshwar Prasad, Swetha Reddy A	702
124	Land Use Land Cover Classification using Machine Learning Harsh Waghela, Saurin Patel, Pooja Sudesan, Soham Raorane, Rohan Borgalli	708
125	Deep Learning Aided Emotion Recognition from Music R Raja Subramanian, Kokkerala Aditya Ram, Dola Lokesh Sai, K Venkatesh Reddy, Kondeti Akarsh Chowdary, Kundu Dheeraj Datta Reddy	712
126	Estimation of Accuracy Level for Sentiment Analysis using Machine Learning and Deep Learning Models V. Vanthana, K. Kartheeban	717
127	Heart Disease Prediction Model using Machine Learning Binju saju, V Asha, Arpana Prasad, Harish Kumar P, Rakesh V, A. P. Nirmala	723
128	Poaceae Family Leaf Disease Identification and Classification Applying Machine Learning Arpana Prasad, V Asha, Binju Saju, Likhitha S, Mayuri P	730

129	An Extensive Study on HAR Systems to Recognize Daily Activities using Deep Learning Approaches Gayathri Tippani, Veerraju Gampala	736
130	Deep Network Analysis and Prediction of Ophthalmic Disorders M. Darshini, M. Hemamalini, Jeyasheela Rakkini, G. Bagyalakshmi, V. Gomathi	743
131	Artificial Intelligence based System in Protein Folding using AlphaFold Pragya Srivastava, Shreyansh Suyash, N. Jayapandian	750
132	Online Voice based Smart Security and Automation System for Real Time Application using Artificial Intelligence M. Bhavani, R. Brinda, P. S. Manoharan, S. Ramalingam	756
133	Diagnosis of Neurodegenerative Diseases by Gait Analysis using Triblock CNN and Deep RQA Techniques Vajiha Begum S. A, Pushpa Rani M	762
134	Secured IoT Malware Detection Framework using AI based Fuzzy Logic Systems V. S. Saranya, G. Ramachandran, S. Chakaravarthi	771
135	Corneal Ulcer Feature Extraction and Image Classification using a Deep Convolutional Network and the VGG 16 Model S. Janet Grace Susila, D. Kavitha	780
136	Intelligent Deep Residual Network based Brain Tumor Detection and Classification K. Kartheeban, Kapula Kalyani, Sai Krishna Bommavaram, Divya Rohatgi, Mathur Nadarajan Kathiravan, S. Saravanan	785
137	A Systematic and Bibliometric Review on Face Recognition: Convolutional Neural Network Aakanksha, Gurpreet Singh, Jaspreet Singh, Deval Verma	791
138	Artificial Intelligence based Smart Cosmetics Suggestion System based on Skin Condition Kavyashree N, Rama Satish K V, Prasanna Rajaram Rasal, Rahul Jalindar Jadhav, M. Saidireddy, K G Kharade	797
139	Indian Agriculture Supply Chain Management using Blockchain Technology and CNN D. N. V. S. L. S. Indira, M. Hema Reddy, G. Sri Jyothi, K. Rohith, K. Sravya, G. Jahnavi	802
140	Real-Time Face Mask Detection from CCTV Video Frames using Deep Neural Networks V Anantha Natarajan, Putta Vishnu Vardhan, Nayakula Murahara Sai Priya, Nunna Vineeth, Parthu V	809
141	An Intelligent Convolutional Neural Network based Potholes Detection using Yolo-V7 Madarapu Sathvik, G. Saranya, S. Karpagaselvi	813
142	A Review of Generative Adversarial Networks(GANs) for Technology-Assisted Learning : Solving Teaching and Learning Challenges K. Dinesh Kumar, Sarot Srang, Dona Valy	820
143	A Survey on Quantization Methods for Optimization of Deep Neural Networks Uday Kulkarni, Abhishek S Hosamani, Abhishek S Masur, Shashank Hegde, Ganesh R Vernekar, K Siri Chandana	827

144	Analysis of CNN Model with Traditional Approach and Cloud AI based Approach Utkarsh Kushwaha, Puja Gupta, Sonu Airen, Megha Kuliha	835
145	Liver Tumor Grade Detection using CNN based LSTM Model with Correlated Feature Set from CT Images Venkateswarlu Gavini, G. R. Jothi Lakshmi	843
146	Image Error Concealment Method by Hiding a Copy of the Same Image in it in Spatial and Wavelet Domain before Transmission Ghouse Ahamed Z, Anuj Jain, V. K Sharma	851
147	SaRa: A Novel Activation Function with Application to Melanoma Image Classification Mohammad Naved Qureshi, Mohammad Sarosh Umar	854
148	DeepFake Detection Through Key Video Frame Extraction using GAN Lalitha S, Kavitha Sooda	859
149	Image Inpainting for Fingerprint Analysis Milind Bhilavade, K. S. Shivprakash, Meenakshi R Patil, Lalita S Admuthe	864
150	An Interpretation on Brain Gate System Network and Technology- A Study Sowmya K, Sushitha S	868
151	Air Compression Massage System for Chronic Vein Disorders Deekshita R, Priscita K, Shruthi Ram R, Vigneshwari N, M. Anisha, Gokul M	874
152	Traffic Sign Detection using Hog and GLCM with Decision Tree and Random Forest Asha J, Giridhran R, Agalya K, Sathya R	879
153	Optimal Allocation of Distributed Generation using Modified Grey Wolf Optimizer Ibrahim Alkhaleel Altayara, Essam A. Al-Ammar, Ghazi A. Ghazi, Ahmed A. AL Katheri	884
154	A Comparative Study of Feature Selection Methods for Activity Recognition in the Smart Home Environment John W. Kasubi, Manjaiah D. Huchaijah	890
155	Emotion Recognition from Telugu Speech using Probabilistic Support Vector Machines Ratna Kanth Nelapati, Saraswathi Selvarajan	896
156	Smart Cervical Band for Detection of Cervical Spondylosis using IOT Technologies M. Arunkumar, K. Pugalendhi, S. Agalya	900
157	Improvement of Safety in Road Environment by Designing an Advanced Driver Assistance System V. Gokula Krishnan, Pinagadi Venkateswara Rao, M. Navaneethkrishnan, V. Prabhu, D. Parkavi, T. Tamilarasan	907
158	A Novel Fish Optimization Algorithm for Offshore Disease Detection in Fishes using a Smartphone App K. Sujatha, T. Kalpalatha Reddy, N. P. G. Bhavani	912
159	Identifying Patterns in Common Vulnerabilities and Exposures Databases with Exploratory Data Analysis Atul Kumar, Ishu Sharma	919
160	Fertilizer Spraying using Active Learning in Precision Agriculture to Improve the Crop Yield N. Rajeswari, D. Kavitha	925

161	A Comparative Review: Detection and Classification of Cervical Cancer from Pap-Smear Images Krishna Prasad Battula, Sai Chandana Bolem, Jonnadula Harikiran	932
162	Non-Sequential Indexing of Videos using Linguistic Computation Sanjana Hukkeri, Ashish H, Ritu V. Malage, Preethi P, Mamatha H. R	939
163	Modeling of Chicken Swarm Optimization with Hybrid Networks for Visual Places Recognition S. Senthamizhselvi, A. Saravanan	946
164	Eye-Move, An Eye Gaze Typing Application with OpenCV and Dlib Library Abhaya V, Akshay S, Chandan C Bagan, Dhanraj K, Shyamala G	952
165	A Survey on Application of Metaheuristics Techniques for Ensemble Feature Selection (EFS) S. Vijayalakshmi, V. Prasanna Venkatesan	958
166	SADGF: Surveillance based Anxiety Detection using Gender- based Facial Emotion Recognition Beulah Divya Kannan, Nithyakamal Ilamurugu	966
167	Data Extraction Approach using Natural Language Processing for Sentiment Analysis Shreyash Mishra, Siddhartha Choubey, Abha Choubey, Yogeesh N, J Durga Prasad Rao, P. William	970
168	Android based Recommender System (ARS) to Detect Breast Abnormalities M Kavitha, Venkata Krishna P, V Rama Krishna, Sreenivasulu Digavinti, M Kalyani, Tiruluka V S Naga Divya	973
169	Chronic Kidney Disease Detection using AdaBoosting Ensemble Method and K-Fold Cross Validation N. Mohana Suganthi, Jemin V. M, P. Rama, E. Chandralekha	979
170	Experimental Setup of Apache Spark Application Execution in a Standalone Cluster Environment using Default Scheduling Mode M. Jayanthi, K. Ram Mohan Rao	984
171	Efficiency Enhancement using Least Significant Bits Method in Image Steganography P. Subhasri, S. Santhoshkumar, A. Sumathi, C. Balakrishnan, F. Kurus Malai Selvi	989
172	Hand Gesture Recognition using DenseNet201-Mediapipe Hybrid Modelling Prachetas Padhi, Mousumi Das	995
173	Analysis and Detection of Monkeypox using the GoogLeNet Model Upendra Singh, Lokendra Singh Songare	1000
174	Contrast Enhancement of Lung CT Scan Images using Multi-Level Modified Dualistic Sub-Image Histogram Equalization K. Ezhilraja, P. Shanmugavadivu	1009
175	Measuring COVID-19 Opinion in the Online Debate using an Unsupervised Model Priyadarsini K, Jeba Sonia J, Vijayalakshmi K, Anbazhagu U. V	1015
176	ClassHotel: Application of Data Analytic Techniques for Online Hotel Recommendation R Raja Subramanian, M Poojith Reddy, K Kousik, S Rupesh, S Rohith, B V Sai Kumar	1021
177	Design of Autonomous Obstacle Avoidance System for Automobiles based on Machine Learning in the Context of Intelligent Transportation Wu Yangming	1027

178	Design and Comparison of Collaborative Filtering Technology for Product Suggestions in E-Commerce P. Rajasekar, B. Mohanraj, S. N. Padhi, N. Sivakumar, Lavanya J, Charles Prabu. V	1031
179	Prediction of YouTube View Count using Supervised and Ensemble Machine Learning Techniques Manikandan P, Sharmila Rajam J, Manimuthu A, Sathya Narayana Sharma K	1038
180	Production Planning in Process Industries using CEC 2021 Winning Algorithms Remya Kommadath, Aman Kumar Saini, Prakash Kotecha	1043
181	Performance Evaluation of Recently Proposed Metaheuristics Algorithms on Solving Job Shop Scheduling Problem Remya Kommadath, Bibekananda Ramchandani, Makkitaya Swarna Nagraj, Prakash Kotecha	1051
182	Pre-Trained Xception Model-based COVID Detection using CXR Images M. Gayathri Lakshmi, Komal Singh, R. Beulah Jeyavathana, Venkatasubramanian, V. Satish Goud, A. Deepak	1059
183	Facial Emotion Recognition using Deep Learning Approach Sowmiya R, Sivakamasundari G, Archana V	1064
184	A Novel Object Detection Framework using Convolutional Neural Networks (CNN) and RetinaNet Archana V, Kalaiselvi S, Thamaraiselvi D, Gomathi V, Sowmiya R	1070
185	Machine Learning based Botnet Detection in Large-Scale Network Alan Shine Manuel, Esther Daniel, S. Durga, Beulah Rani I	1075
186	A Smart Recommendation System for Medicine using Intelligent NLP Techniques C. Srinivasa Kumar, Ranga Swamy Sirisati, Viswanath Gudditti, Kanusu Srinivasa Rao, Ratna Kumari Challa	1081
187	Design and Development of Automatic Tomato Sorting Intelligent System using Image Processing Baluprithviraj. K. N, Dhanalakshmi. M, Dharanidharan. D, Gokulkrishnan. K, Janarthanan. S, Madhan Mohan. M	1085
188	Evaluation of Feature Selection and Multi-Class Prediction Methods for Metal Stress Yash Rathod, Dinesh Vaghela	1091
189	Deep Learning Approaches for Detecting Diabetic Retinopathy using CNN Models M. Mukesh Krishnan, S. Thanga Ramya, K. Kirubanathavalli, S. Lalitha, J. Diofrin, M. Vadivel	1096
190	Construction of Malaria Disease Prediction System using Deep Learning J Sivakumar, Sudhagar D, Vithya V T, Jaichandran R, K. Narasimha Raju and C. S. Sundar Ganesh	1103
191	Colour based Object Classification using KNN Algorithm for Industrial Applications N C Santosh Kumar, S Uma Maheswari, Vigneshwari. M, P V Pramila, Rashmita Khilar, Ashok Kumar	1110
192	Splicing Image Forgery Detection by Deploying Deep Learning Model N Krishnamoorthy, C. Amuthadevi, M. K. Geedtha, Poli Lokeshwara Reddy, Anitha Rani K S, R. Gopinathan	1116

193	DWT Algorithm for Macro & Micro Block based Multiple Histogram Shifting for Video Data Hiding K. Venkata Ramana, Sowtharya C, Jithesh K, Poli Lokeshwara Reddy, Apoorva M C, Ashok Kumar	1121
194	Bio-Inspired Algorithm for Speed Control of Electric Vehicle K. Rameshkumar, T. J. Catherine, M. Sudhakar, I. Kathir, S. Hemavathi, K. Balamurugan	1128
195	Analysis of Crowd Features based on Deep Learning Puja Gupta, Varsha Sharma, Sunita Varma	1134
196	Improving the Power Consumption of Sensor Networks using Optimization Technique for Sleep Scheduling Mechanism G. Vinoth Rajkumar, M. Vargheese, A. Anna Lakshmi, K. Ramanan, D. David Neels Ponkumar, S. P. Ramesh	1140
197	Penalty based Sentimental Text Generation Framework using Generative Adversarial Networks K. Chitra, G. Kavitha, P. Latchoumy	1147
198	Text Localization and Recognition from Natural Scene Images using AI D. Shekar Goud, Vigneshwari. M, Aparna P, Vijayasekaran G, Ajay Singh Yadav, Ashok Kumar	1153
199	IDCSNet: Intrusion Detection and Classification System using Unified Gradient-Boosted Decision Tree Classifier Kondru Mounika, P. Venkateswara Rao	1159
200	Intelligent Document Finding using Optical Character Recognition and Tagging A. Mohamed Abbas, M. Syed Shahul Hameed, S. Balakrishnan, K. S. Anandh	1165
201	Oculus: A New Dimension to Virtual Reality Akshiv Nagta, Bhanu Sharma, Sheena, Avinash Sharma	1169
202	An Automated Coronary Artery Disease Diagnosis System using Machine Learning Kanwarpartap Singh Gill, Avinash Sharma, Vatsala Anand, Sheifali Gupta	1173
203	An Efficient Fashion Recommendation System using a Deep CNN Model B Suvarna, Sivadi Balakrishna	1179
204	Implementing BeagleBone Black as a Single Board Computer by Transferring E-mail using SMTP Dharshini S, Haneesh T, Venugopal E, Rama Devi S, Sree Dhviya M, P. Sivakumar	1184
205	An Efficient and Robust Breast Cancer Detection in Mammogram Image using Improved Threshold Extraction Method A. Hema Malini, Yashwanth G, Yellamrajithendra, Venkataramana Y	1188
206	Classification of WBC based on Deep Learning using Microscopic Images Rajalakshmi T, Senthilkumar C	1194
207	Advanced Protection System for SCADA using Fog Computing M. S.Sujatha, P. Shashank, Shahul Ahammad, R. Dharma Teja, Vijji K, A. R. Hithesh	1202
208	Computer Vision- Hybrid Learning based on Multi Scale Dilated Convolution Module Mechanism Implemented for Object Detection D. Kalpanadevi, K. Kartheeban, M. Mayilvaganan, P. Bamaruckmani	1208
209	A Sentimental Analysis of Legal Documents using Deep Learning Approach Shunmuga Lakshmi Priya. K,Thamarai Selvi. D, Kalaiselvi. S, Gomathi. V	1212

210	Optimal Trained Deep Maxout Model for Intrusion Detection in Cloud Meble Varghese, M. Victor Jose	1220
211	Real Time Road Lane Detection using Computer Vision Techniques in Python Salna Joy, Mamta B S, Tejas B Mukesh, Mohammed Muzammil Ahmed, Uday Kiran	1228
212	A Review on Digital Farming using Machine Learning Techniques N. Yedukondalu, V. Bhuvana Kumar, A. Narayana Rao	1233
213	A Unique Model for Detecting the Diseases using Decision Making Approach (DMA) Shaik Nagul, Y Padma, Siyyadula VR Vara Prasad, Shail Jakeer Hussain	1239
214	A Robust Framework for Glaucoma Detection and Segmentation of Real Time Fundus Images using Hybrid ASCL Model G. Charulatha, Maheswaran U, Kalyan Kumar G, N. Sasirekha, Meenakshisundaram. N	1244
215	Examination on Fire Detection Methods using Computer Vision Sikhin V C, S Sankara Subramanian, Sreelekshmi R V	1251
216	Detection and Classification of Breast Cancer from Microscopic Biopsy Images using Modified Neural Network L. Vanitha, K. Jayamani, N. Sasirekha, Yogalakshmi.V, Sajiv G	1259
217	Real-Time Sidewalk Crack Identification and Classification based on Convolutional Neural Network using Thermal Images G. Karthikeyan, Dhaarani T G, R. Anusuya, Kalyan Kumar G, Joel T, R. Thandaiah Prabu	1266
218	A Machine Learning based Approach to Early Stage Diabetes Prediction Yudheksha GK, Vijay Murugadoss, P Sanjana Reddy, Harshavardan T, Shivram Sriramulu	1275
219	Optical Flow-based Tracking of Vehicles using Adaptive Particle Filter Target Tracking Algorithm based for Accident Prevention Mohamed Dawood Shamout, R Sivaprasad, N Ramya, Sarang Pande, Rishikaysh Kaakandikar, Mochammad Fahlevi	1281
220	Intrusion Detection System for Cyber Attacks in Food and Beverage Industry Beulah Rani I, G. Matthew Palmer, G. Jasper W.Kathrine, S. E Vinodh Ewards	1287
221	Dimensions of Automated ETL Management: A Contemporary Literature Review G. Sunil Santhosh Kumar, M. Rudra Kumar	1292
222	Renewable Energy based Security System for Isolator (Air Brake Switch) using Fingerprint Sensor with Internet of Things Andril Alagusabai, Roossvelt Prabhu K A V, P. Jesu Jayarin, Vishnu Vardhan Rao G, V Jaiganesh, R. Gopinathan	1298
223	A Meta-Analysis of Efficient Countermeasures for Data Security Deepa.M, J. Dhiipan	1303
224	DPMM: Data Privacy and Memory Management in Big Data Server using Hybrid Hashing Method Manjula GS, T. Meyyappan	1309
225	Smart Traffic Management System for Priority Vehicle Clearance using IoT A Arul Edwin Raj, Revanoori Bhargavi, S Meghana Anjali, A Teja	1317
226	IoT based Patients Monitoring System in Healthcare Service Sudheer Hanumanthakari, SVVSR Kumar Pullela, Shankar Nayak Bhukya, K. Vijayalakshmi, S Rehan Ahmad, Narendra Kumar	1324

227	A Review of Remote Health Monitoring System for Patients using IoT Vinoth Kumar K, Anil Hegde H, Abhishek, Dhruva S Srinivas, G Krishna Chaitanya	1330
228	Knitting Machine Monitoring System using Arduino T. Logeswaran, Bavya S, Jyothiprabha D, Karthika S, Suganeshwaran S. Ranjith Kumar R	1334
229	IoT based Automated Coal Mine Detection and Immediate Rescue Robot K. Thivyabrabha, Sharmila A, Dhivya Priya E L, K. R. Priyadharshini, J. S. Sujin	1338
230	Smart Driving Assistant for Upclimbing Hill Slope Area Madhan Mohan. M, Baluprithviraj, Sridhar. S, Varsinishrilaya. P. K, Narendh. N, Kalavathi Devi T	1344
231	A Review of Sequential Control & Monitoring of Distribution Lines in Substations Manochitra G, Vinoth Kumar K, Shiva Shankara M, Yashvantha P, Sindhu P, Binay Kumar Yadav	1347
232	Multifunctional Unmanned Ground Vehicle R. Aadithya, M. Harish, P. S. Manoharan	1351
233	Widened Thresholded Rider Optimization Algorithm for Optimal Switching Loss Reduction in Three-Phase Voltage Source Inverter Rajeshkumar. G, P. Sujatha Therese	1355
234	Enhancement of Yarn Quality by Controlling the Humidity and Temperature Baluprithviraj. K. N, Monesh. M. S, PraneshRaj. C, Varuna. S	1363
235	Exploring the Statistical Properties and Developing a Non-Linear Activation Function Ochin Sharma	1370
236	Research on Robust Aircraft's Trajectory Tracking using Adaptive Controller Sarange Shreepad, S. Deena, Ramakrishnan Raman, Dhires S Shastri, Rajesh A S, S. K. Krishnakumar	1376
237	Acquisition of CSTR's Temperature Data in Mobile Phone using Wi-Fi D. Shekar Goud, Parimala Prabhakar, K. Muthulakshmi, Roopa H, Kamal Alaskar, Amara S A L G Gopala Gupta	1383
238	DFIG Powered Yaw Function for Wind Energy Network Mallaiah Balaganur, Parimala V, Arunsrinivas T, Muthuraj B, Rutuja Hiware, Shradha Umathe	1392
239	The Importance of Medical Robots in Improving Healthcare Services Mohamed Alseddiqi, Budoor AlMannaei, Osama Najam, Anwar AL-Mofleh	1397
240	Sensor Assisted Ghat Road Navigation and Accident Prevention G Ravindra, M. Venkateswara Rao, Venkatasivanagaraju. S	1402
241	Simple Piezoelectric based MEMS Energy Harvester Design and Simulation G Dinesh Ram, T Aravind, S Praveen Kumar, U Hariharan, G Jeyachandran, G Goutham	1408
242	Comparative Analysis of Different MPPT Algorithms for Roof-Top Solar PV System Arun Kumar Maurya, Anil Kumar Rai, Hemant Ahuja	1412
243	Load Frequency Control by using Different Controllers in Multi-Area Power System Networks Arun Kumar Maurya, Hera Khan, Anil Kumar Rai, Hemant Ahuja	1418

244	Components & Control Scheme used for Line of Sight Stabilization in Defence Applications Arun Kumar Maurya, Yashdeep Tyagi, Tanu, Hera Khan, Deepak Narang, Hemant Ahuja	1425
245	Fuzzy based Pollution Severity Prediction In Polymer Insulator using Harmonic Analyzer B. Sajeena Ponmani, R. V. Maheswari, B. Vigneshwaran	1432
246	Indigenous Robot for Advanced Driver Assistance System T. Thivya Tharshini, E. Jeevitha, S. Rayen Subhiksha, H. Jaya Dharshini, P. S. Manoharan	1437
247	Performance Improvement of 16 Bus System using Hybrid Power Flow Controller S. Hemalatha, S. Gomathi, S. Devikala, C. Naresh, M. Gnanaprakash, M. Senthil Murugan	1441
248	Evaluation of Quality of Transmission in Disaggregated Optical Network Vidhya J, Ramya G	1448
249	Microstrip Patch Antenna Simulation for Cranial Implant K. Keerthiga, M. Najira Banu, K. Jayabharathy	1454
250	Design and Analysis of an Adaptive QoS Aware Approach for supporting Multiple Services using Meta Heuristic Enhanced Whale Optimization Algorithm over Hybrid Cloud Environment (EWOC) Premnadh Katkam, P. Anbalagan, V. V. S. S. S. Balaram	1459
251	Effectual Assesment of Machine Learning-based Heart Failure Prediction Prototype B Nithya, Asha V, A P Nirmala, Binju Saju, Dobariya Parth, Jain Komal	1467