2023 International Conference on Recent Trends in Electronics and Communication (ICRTEC 2023)

Mysore, India
10-11 February 2023

IEEE

IEEE Catalog Number: CFP23DC7-POD
ISBN: 979-8-3503-9620-1

IEEE Catalog Number: CFP23DC7-POD
ISBN (Print-On-Demand):   979-8-3503-9620-1
ISBN (Online):   979-8-3503-9619-5

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

Conference Record # 56977

International Conference on Recent Trends in Electronics and Communication Engineering (ICRTEC)

TABLE OF CONTENTS			

42	P Samyuktha, Srinivas D and Himabindu T	Grid-connected solar power generating systems with superior power quality controlled using PBT	64
44	Himabindu T, Chaitanya G and Srinivas D	SCIG Based Wind Energy Conversion System Fed DC Micro Grid Using DTC	70
48	Ramya S and Jayasri B S	A Review on the analysis of Behavioral pattern of Students during pandemic COVID-19	75
49	Akhil V M, Pavan Pundalik Mangaji, Rahul N Murthy, Rakesh D, Shridatta Hegde and Sukesh V Devadiga	Gear Fault Diagnosis Using SVM Based on Empirical Mode Decomposition	81
52	Ankitha A Nayak and Shashank Shetty	A Systematic Analysis on Task Scheduling Algorithms for Resource Allocation of Virtual Machines on Cloud Computing Environments	85
55	M Prathiksha, Priyanka R Badiger, Varshini Thangaraj, D A Varshini, Sahana Srikanth and Sanjeev Gurugopinath	A Survey on Machine Learning Techniques for Multimodal Biomedical Signal Processing	91
57	Harjeevan Singh	Designing a Hybrid Optical Fiber/FSO System For Last Mile Users Under Tropical Weather Conditions	96
58	Lakshmi B S, Rekha K S	A Survey Paper on Blockchain Technology with supply-chain management in Charity donation System	102
59	Ranjan Mahapatra, Gnane Satapathi, Pradeep Kumar, ,Akshith N Shetty, Shashwath Shettigar, Abhinav J P, B Shivalal Patro, Diika Satapathy	Design and analysis of microstrip patch antenna	106
60	Arjun Chakkrapani, Preethaa Jansirani	Efficient FPGA Implementation of Phase Shift Keying	112
61	Lokesh B S and Narasimha Kaulgud	A review on analysis of transport layer security in open quantum safe cryptographic algorithm	117
64	Bhushan K Munoli, K Abheeshta Jain, Prem Kumar, , Aditya Ram P S and Ashwini	Human Voice Analysis to Determine Age and Gender	121
65	Ranjan Mahapatra, N S V Shet, Gnane Satapathi, B Shivalal Patro and Dipika Satapathy	Analysis of Modulation schemes Using Rayleigh and AWGN channel for wireless sensor nodes in Internet of Things	125

72	Rajesh Kannan S, Ezhilarasi P, Rajagopalan VG, Sushanth Krishnamithran, HRamakrishnan H, Harish Kumar Balaji	INTEGRATED AI BASED SMART WEARABLE ASSISTIVE DEVICE FOR VISUALLY AND HEARING-IMPAIRED PEOPLE	130
74	Ananya H P, Shreya K Magadum, Swathi S and Anitha S Prasad	Real Time tomato plant leaf disease detection using convolutional neural network	136
75	P A Anshad , Niteesh M Gowda, Vijaykumar Kandakur and Anitha S Prasad	Forest Fire Detection Using nRF24L01 Wireless Sensor Network And Prediction by Machine Learning Model	142
78	S Kannan, Prabakaran D, Dhenesh Kumar S, Sivaram S	A DEEP LEARNING-BASED CONVOLUTION NEURAL NETWORKS TO FORECAST WIND ENERGY	147
80	Ashish sharma and Rinku Garg	New Technology for Harnessing Energy: Future of Hydrogen	153
82	Mohan V S, Abhay Gowda G, Rekha R Nair, Kishore S and Tina Babu	Face Mask detection using Mask R-CNN to control the spread of Covid-19	160
83	Raye Haarika, Tina Babu, Rekha R Nair and Rajesh T. M	Breast Cancer Prediction using Feature Selection and Classification with XGBoost	166
86	Shreya G Abhyankar, Shashank S Bharadwaj, G Shobha Rani, Pruthvi G Karigiri, Sahana Srikanth and Sanjeev Gurugopinath	A Survey on Music Genre Classification Using Multimodal Information Processing and Retrieval	172
87	Niranjan L, Manjunath V Gudur, Parthasarathy P, Pradeep Kumar Mallaiah, Mahesh B Neelagar and Sreekantha B	IoT-based safety system for swimming pools to avoid sinking of individuals	178
91	Fida Fareesha, Chanadanashree Y K, Gowthami V, Remya Jayachandran, and Shaeen Kalathil	Real-Time Artificial Mood-tracking and Health-monitoring System (RAMAHS) for people with mental illness and their Caregivers	183
92	Nilakshee Rajule, Mithra Venkatesan, Radhika Menon, Anju Kulkarni	Mobility Prediction in Cellular Networks: A Survey	189
93	Nandini B M and Narasimha Kaulgud	Wavelet-based method for enhancing the visibility of hazy images using Color Attenuation Prior	198
94	Darshan Babu K S, G Adarsh, Karan K ,Shylesh Kumar P B, Rupesh S, and Remya Jayachandran	A Novel scheme for IoT based Real Time Monitoring of Biodiesel Quality	204
95	Amith Bharadwaj , Ananya Kashyap, Gurusatwik Bhatta, Remya Jayachandran and Rajalekshmi Kishore	A Survey on Terahertz Devices-A cutting edge Technology	208

96	Rajalekshmi Kishore and Sanjeev Gurugopinath	Energy-Efficient Ant Colony Task Assignment Based Spectrum Sensing for Cognitive Radios	214
97	Fuhad Muhammed, Sayana Tomes, Manu Elappila and Shamanth Nagaraju	Automated Contactless Continuous Temperature Monitoring System for Pandemic Disease Controlling Infrastructures	220
105	Manjunath V Gudur, Saravanan M, Parthasarathy P, Niranjan L, Mahesh B Neelagar and Sreekantha B	Machine Learning based Routing approach and Resource Management in Vehicular Adhoc Networks	226
106	Parthasarathy P, H N Shree Harsha, Manjunath V Gudur, Niranjan L, Mahesh B Neelagar and Sreekantha B	A novel optimization approach using multi-objective PSO incorporated with SEPIC and buck-boost converters for renewable energy sources	230
107	Sharzeel Saleem, Jeba Shiney O and Pratikshit Vashishta	Binary Classification of Human Emotion using EEG and LTSM	239
113	Sanjay Tippannavar, Yashwanth S D, Chandrashekar Murthy B N, Madhusudhan M P, Puneeth K M, , and Vinay Prasad M S	Comparative Analysis and Development of an Efficient Management System for a Photo-Voltaic Module	243
114	Sanjay S Tippannavar, Puneeth K M, Yashwanth S D, Madhusudhan M P, Chandrashekar Murthy B N and Vinay Prasad M S	EVAS – Emergency Vehicle Alert System using LoRa for automobiles	250
115	Sanjay S Tippannavar, Vijay Mishra, Yashwanth S D, Rishitha Gowda, Sathvik H R and Ajay M	Smart Transformer – An Analysis of Recent Technologies for Monitoring Transformer	255
118	Alakesh Sharma, Jeba Shiney O	An Analysis on the Techniques for Water Quality Prediction from Remotely Sensed data	266
122	Anita Patrot , Harish H, Shambbavi B, Geetha P L,Sahana	NBA GAME PREDICTION USING MACHINE LEARNING ALGORITHM	272
126	Ramyateja Singamshetty, Sangani Sruthi, Kodati Chandhana, Sreedhar Kollem,and Rajendra Prasad Ch	Brain Tumor Detection Using the Inception Deep Learning Technique	278
129	Shashi Gupta, V. Suresh Kumar, Alex Khang, Bramah Hazela, Nivethitha T and Bhadrappa Haralayya	Detection of Lung Tumor using an efficient Quadratic Discriminant Analysis Model	285
130	Shashi Gupta, Surabhi Saxena, Alex Khang, Bramah Hazela, Chandra Kumar Dixit and Bhadrappa Haralayya	Detection of Number Plate in Vehicles using Deep Learning based Image Labeler Model	291

131	Shashi Gupta, Ahmed Alemran, Prabhdeep Singh, Alex Khang, Chandra Kumar Dixit and Bhadrappa Haralayya	Image Segmentation on Gabor Filtered images using Projective Transformation	297
132	Shashi Gupta, Waseem Ahmad, Dimitrios A. Karras, Alex Khang, Chandra Kumar Dixit and Bhadrappa Haralayya	Solving Roulette Wheel Selection Method using Swarm Intelligence for Trajectory Planning of Intelligent Systems	303
136	Adi Surya Suwardi Ansyah, Miftahol Arifin, Muhammad Bahauddin Alfan, Matthew Vieri Suriawan, Nadhif Haikal Farhansyah, Ary Mazharuddin Shiddiqi, Hudan Studiawan	MQTT Broker Performance Comparison between AWS, Microsoft Azure and Google Cloud Platform	308
140	Sangeetha D P, Sabitha R, Shirisha J and Balaji A	Investigating and Checking the Javelin Athlete's Movement Parameters Using Smart WSN	314
141	Sivakumar T, Sashi Rekha K, Vikram N and Maruthu Kannan B	Misbehavior Node Detection using Hamming Residue Mechanism in Clustering WSN	319
144	Kishore Sonti V J K, Sundari G, Bernatin T and Sahaya Anselin Nisha A	Ecological Observing using Sensor and IoT to Protect the Global Warming in WSN	325
146	Sanjay S Tippannavar, Yashwanth S D and Puneeth K M	SDR – Self Driving Car Implemented using Reinforcement Learning & Behavioural Cloning	330
148	Bansilal Bairwa, Madan Murari , Mahammadgaous Sahapur, Kavya M.R, Md.Firdosh Khan	Drive Cycle Based Speed Control of BLDC Motor Using Pulse Width Modulation	337
150	Akula Shravya Sri,Bobbili Varshith Reddy,Kanuri Balakrishna,Vollala Akshitha, Sreedhar Kollem and Ch Rajendra Prasad	Detection of MRI Brain Tumor Using Customized deep learning method Via Web App	343
151	Insha Yaqoob Sheikh	Efficient Novel Binary to Gray Code Converter Using Coulombic Interaction on Quantum Dot Cellular Automata	350
153	Anka Rao Mogili, Sreenivasulu. J, Prudhvi Sai Bojanapalli	Sliding Mode Controller with Disturbance Estimator for Fuzzy Logic Controller fed PMSM Drives	356
154	Naveen Kumar Peelam, Kiranmayi.R, Nagabhushanam. K, Swathi.N	Wind Turbine Integrated Generator Rectifier System with Fuzzy Logic Controller based on MPPT	362

155	Mallapu Vijaya kumar, Maruthi Kudadala	a novel fuzzy logic controller topology for grid connected pv system by dc voltage droop control	368
158	Bansilal Bairwa, ShriHarinayaka P, Sagar B S, Ashwini Kumari P	Temperature Dependent Capacity Fade Prediction of Electric Vehicles Batteries	373
159	Sathya K and Guruswamy K P	Performance Analysis for LLC Resonant Converter in Electric Vehicle Applications	378
161	Bansilal Bairwa, Manohar K A, Mallikarjun M Magadum, Keerthi S, R Chitrashree	Modeling of Low Cost Battery Charge Controller for Stationary to Mobile Applications	384
162	Shubham Subhas Borkar, Guruswamy K.P	Performance Analysis of Half-Bridge LC Resonant Converter for UPS Battery Charging Application.	390
166	Vanditha M, Surendra R Hegde, Snehith K, Anitha S Prasad and Eshwari A Madappa	Agricultural Supply Chain Management System using Blockchain	396
169	Geetha Rani E, Roshan Jose S, Joel Thomas Chacko , Joshua Paul C , Jeanette Krizelda K	Peer-to-Peer File Streaming Using Web Sockets Protocol	400
175	M. Venkata Subbarao, G. Challa Ram, D. Ramesh Varma	Performance Analysis of Pistachio Species Classification using Support Vector Machine and Ensemble Classifiers	406
176	Rajini H, Bansilal Bairwa , Arpita Banik, Surineni Jagadeesh	Development of ON Road Charging System for Electric Vehicle Applications	412
179	A.Ravi, Gnanasree Dupaguntla, Devi Krishna Tadepalli	Image Denoising Using Feature Map Based Convolutional Neural Networks	418
180	Nanditha Krishna, Padma C.R., Surabhi A.S, Saritha Pal, Aishwarya Prabhu, Sahana P	A review on VARIBRACE - A wearable therapeutic device	423
182	Yashavanth T R, Suresh M	Performance Analysis of Multimodal Biometric System Using LBP and PCA	429
184	Shashidhar R, Sanjay Tippannavar, Sushma B S and P Shukla	Smart Electric Wheelchair for disabled and paralyzed person using Attention Values on Arduino	434
187	Rakheeba Taseen, Haseeba Yaseen, Niranjan L,Gadige Radha, Mahesh B Neelagar and Shwetha N	An Innovative Method for Energy Intensive Routing and Transmission Network Positioning in Integrated Wireless Detector Networks	439

190	Armend Salihu, Halil Snope, Artan Luma, Jaumin Ajdari	Comparison of time complexity growth for different methods/algorithms for rectangular determinant calculations	446
198	Harish S.V and Archana N.V	A Distributed Cluster Based Protocol to Extend Lifetime using Fitness Function algorithm in Wireless Sensor Networks	452
199	J Suneetha, Niranjan L, Husna Tabassum, Swamy Goud, Rakheeba Taseen and Mahesh B Neelagar	A Wireless Detector Network for Three-Dimensional Positioning Using Artificial Neural Networks	458
204	Susandhika m, Shirly Edward A	M/S. The National Institute of Engineering	463
212	I. Evangeline Felicia, V. Gomathi and E. Isac Paulraj	Two-Port UWB-MIMO Antenna Design with Improved Isolation for WiMAX and X-Band Applications	471
213	Sanjay S Tippannavar, Yashwanth S D, Chandrashekar Murthy B N and Praveen Kumar M S	IoT enabled Smart Car with V2X Enhanced Comunication and Safety Alert system	478
215	H.N.Srinivasa Nayaka , Shankar Nalinakshan,M.S. Ganesh Prasad , Vikram Y and Appalabathula Venkatesh	Design and Implementation of Electrical system in H-Gantry automation for Double Disc Front Brake	483