2022 International Conference on Intelligent Innovations in **Engineering and Technology** (ICHET 2022)

Coimbatore, India **22-24 September 2022**



IEEE Catalog Number: CFP22BW1-POD ISBN:

978-1-6654-5654-8

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:
 CFP22BW1-POD

 ISBN (Print-On-Demand):
 978-1-6654-5654-8

 ISBN (Online):
 978-1-6654-5653-1

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



2022 International Conference on Intelligent Innovations in Engineering and Technology (ICIIET)

TABLE OF CONTENTS

S. No	ECF Id	Title and Author	Page No
1	404479	A NOVEL RECEIVED SIGNAL POWER BASED UNDERWATER POSITIONING SYSTEM USING ACOUSTIC FACTOR Lavyashree K, Somnath Sinha	1
2	404485	CLASSIFICATION AND ANALYSIS OF EPILEPTIC SEIZURE Rhoshnee VS, S. Nirmala Devi	8
3	404487	DESIGN OF RECTANGULAR SLOTTED MICROSTRIP PATCH ANTENNA FOR 5G APPLICATIONS AT 27 GHZ Dipankar Saha, Sudip Mandal, Kabita Purkait	15
4	404489	ANOMALY ANALYSIS IN MACHINE SENSORS T. Parthasarathy, J. Judeson Antony Kovilpillai, H. Mohammed Irfan, B. Ramprasath	20
5	404501	ADAPTIVE PREDICTIVE CONTROL-BASED NOISE CANCELLATION WITH DEEP LEARNING FOR ARRHYTHMIA CLASSIFICATION FROM ECG SIGNALS Rajesh. S. Pashikanti, Amita Anirudhe Shinde, C. Y. Patil	25
6	404504	FOUR-PORT CYLINDRICAL DRA BASED MIMO ANTENNA FOR WLAN APPLICATION Pawan Kumar, Gouri Shankar Sharma, Anshul Gupta	33
7	404506	A COMPARATIVE STUDY ON MACHINE LEARNING ALGORITHMS FOR CONGESTION CONTROL IN VANET Kezia M, Anusuya K.V	38
8	404510	A CLOUD APPLICATION FOR ECG ARRHYTHMIA CLASSIFICATION USING DEEP LEARNING AND N-SQUARE APPROACHES J.N.V.R.Swarup Kumar, G. Sri Jyothi, DNVSLS Indira, G. Nikhil Sai Vijaya Sri, S.B. Mukesh, A. Yochana	45

9	404511	EFFICIENT DATA GATHERING AND ROUTING SCHEME USING MULTIPLE MOBILE SINK IN WIRELESS SENSOR NETWORKS Senthil Kumaran R, Gayathri K, Sheela K, Jayasudha M	52
10	404513	EMERGENCY PACKET ROUTING IN VEHICULAR NETWORKS FOR COLLISION MINIMIZATION IN HIGHWAYS Kezia M, Anusuya K.V	58
11	404514	IMPROVING THE QUALITY OF IMAGE CAPTIONING USING CNN AND LSTM METHOD Pradeepan Lala M, Dhananjay Kumar	64
12	404516	A MEANDER LINE MICROSTRIP PATCH ANTENNA FOR MID-BAND 5G SPECTRUM G Jegan, P Kavi Priya, I. Rexiline Sheeba, Joany R.M, Shyam Parthasarathy	71
13	404517	AN ADAPTIVE POWER ELECTRONIC INTERFACE FOR EV U.Hari Priya, G.Sai Vinay, B.D.Divya Reddy, K. Sudarsana Reddy, K.Sireesha	76
14	404519	A PERFORMANCE INVESTIGATIONS OF MODULAR MULTILEVEL INVERTER WITH REDUCED SWITCH COUNT E. Parimalasundar, K. Suresh, R. Sindhuja, K. Manikandan	83
15	404520	ANALOG SINGLE EVENT ON LOW NOISE AMPLIFIER WITH NO SOURCE INDUCTOR Rajendiran P	88
16	404521	FREQUENCY RESPONSE ANALYSIS OF OCTAGONAL COMPLEMENTARY SPLIT RING RESONATOR-BASED METAMATERIAL Sagadevan K, Elizabeth Caroline B, Nandha kumar T K, Lavanya B	95
17	404526	EXAMINE AND DEVELOP NOVEL SUBSTRATE INTEGRATED WAVEGUIDE CIRCULATORS IN THE KU BAND Manish Sharma, Nitesh Kashyap	99
18	404528	IMPLEMENTATION OF CONVOLUTIONAL NEURAL NETWORK FOR EPILEPTIC SEIZURE DETECTION	106

		Loganathan.S, Sujatha.C.M, Guru Nivash.R, Krish Srinivas.R, Niveddita.J, Nivedha.V	
19	404532	DESIGN AND SIMULATION OF WASHING MACHINE EQUIPPED WITH UNIVERSAL MOTOR Bondala Sahithi, Manitha P. V, Lekshmi S	111
20	404534	A MILLIMETER WAVE ANTENNA FOR WIRELESS BODY AREA NETWORK APPLICATIONS G. Umamaheswari, Praveena A	118
21	404538	PERFORMANCE ANALYSIS OF A MODIFIED LIGHTWEIGHT AUTHENTICATION SCHEME FOR QUANTUM KEY DISTRIBUTION Venkateswari R, Arun Kannan S, Siva Bharathi K.R.	124
22	404539	DOUBLE SECURITY TO COLOUR IMAGES WITH DCT BASED WATERMARKING AND CHAOS BASED ENCRYPTION Amrutha. M, A. Kannammal	130
23	404540	A NOVEL LOGIC LOCKING TECHNIQUE WITH OBSERVABILITY MEASURES TO THWART HARDWARE TROJANS M. Priyadharshini, P Saravanan	139
24	404543	ANALYSIS AND OPTIMUM CLASSIFICATION OF THORACIC DISEASE IN CHEST X-RAYS USING RESNET CNN M. Manikandan, J. Jean Justus	144
25	404545	AN EFFICIENT FPGA IMPLEMENTATION OF CASCADE INTEGRATOR COMB FILTER G.Shanthi, Aruru Sai Kumar, P.Phanidra, G.Samartha Raj, N.Niharika, K.Kalyani	151
26	404546	LEVERAGING EDGE BASED DEEP NEURAL NETWORKS FOR ROAD DAMAGE DETECTION G R Karpagam, Guna M., Lohith Sowmiyan P. S., Sairam Vaidya M.	157
27	404547	BER ANALYSIS OF INTELLIGENT REFLECTING SURFACE AND RELAY ASSISTED NOMA S. Mohandass, P. Reba	164

28	404548	CUSTOM PRECISION METHOD OF FLOATING-POINT OPERATIONS OF FFT PROCESSING FOR OPTIMIZED AREA AND DELAY PERFORMANCE Niharika R, Imtiyaz Ahmed B K, Niranjan L, Sreekantha B	171
29	404550	USE OF SPATIO-TEMPORAL FEATURES FOR EARTHQUAKE FORECASTING OF IMBALANCED DATA Aaditya Sharma, Arnav Ahuja, Sonu Devi, Sumanta Pasari	178
30	404552	CRYPTOCURRENCY VALUE PREDICTION WITH BOOSTING MODELS Swati S, Anuraj Mohan	183
31	404556	TWO STAGE CASCADED COUPLED INDUCTOR CIRCUITS FOR HIGH VOLTAGE GAIN THROUGH DC-DC CONVERTER FOR THE ELECTRIC VEHICLE S.Chitra Devi, A.Ramkumar, K.Rajesh	189
32	404557	A STUDY ON PREDICTING SOFTWARE DEFECTS WITH MACHINE LEARNING ALGORITHMS Anjali C, Julia Punitha Malar Dhas, J. Amar Pratap Singh	195
33	404558	DISCRETE TUNNING RECONFIGURABLE ANTENNA FOR S BAND NAVIGATION RECEIVER APPLICATIONS Sivarama Subramanium G, Suresh Kumar Muthuvel, Anitha G	199
34	404559	OPTIMAL PATH FINDING ALGORITHM FOR LOGISTIC ROUTING PROBLEM Madhura Srinivasan, Sireesha K	203
35	404560	WEBRTC-BASED DECENTRALIZED CHAT APPLICATION WITH MINIMAL LATENCY Rozen Berg D, Tharunraj M, Raj Kumar B, M.R. Sumalatha, Lakshmi Harika Palivela, Vijay Vikrama Karthikeyaa P	210
36	404562	MAXIMUM TORQUE PER AMPERE CONTROLLER FOR 3-PHASE SCALAR CONTROLLED INDUCTION MOTOR DRIVE Shithin Das T S, Roykumar M	216

37	404563	STACKED VARIATIONAL AUTOENCODER IN THE CLASSIFICATION OF CARDIAC ARRHYTHMIA USING ECG SIGNALS WITH 2D-ECG IMAGES S Nithya, M. Mary Shanthi Rani	222
38	404564	ENERGY-EFFICIENT DESIGNS FOR FIR FILTERS USING CSE Maria Nivetha A, Saravanakumar S, Dinesh Kumar V, Mayurappriyan P S, Rukkumani V	227
39	404567	DESIGN OF DIAMOND SHAPED MONOPOLE ANTENNA FOR RADIO NAVIGATION, RADIO LOCATION AND SATELLITE SERVICES Tharini B, A.Kannammal	233
40	404569	COMPARATIVE PATH PLANNING ANALYSIS FOR THE RECOMMENDED E-VEHICLE CHARGING STATION Achuta Hari Priya Nair, Mini Sujith	238
41	404570	SECURING IOT CHIPS FROM HARDWARE TROJAN USING MACHINE LEARNING CLASSIFIERS Lavanya T, Rajalakshmi K	245
42	404572	DESIGN AND ANALYSIS OF FLEXIBLE 2-PORT MIMO ANTENNA WITH REFLECTOR GROUND FOR WLAN APPLICATIONS Ribitha Elizabeth M, Vadivel M	250
43	404573	HYBRID DC-DC CONVERTER FOR DC MICROGRID APPLICATIONS J.S. Sakthi Suriya Raj, P. Sivaraman	255
44	404574	ENHANCED FACTOR BASED WHALE OPTIMIZATION ALGORITHM WITH IMPROVED WEIGHT BASED LONG SHORT-TERM MEMORY FOR CANCER SUBTYPES DIAGNOSIS P. Avila Clemenshia, C. Deepa	260
45	404575	AN EFFICIENT IMPLEMENTATION OF AES ALGORITHM USING CUSTOM KEY Sridevi. K, M. Santhanalakshmi	268
46	404576	ROBUST AND INTERACTIVE DETECTION SYSTEM FOR	273

		CARDIOVASCULAR DISEASE USING ARTIFICIAL INTELLIGENCE	
		Krishnaveni V, Venkateswari R, Darshan V	
47	404577	ANTLION OPTIMIZATION ALGORITHM BASED TYPE II DIABETES MELLITUS PREDICTION Sasithradevi A, Chanthini Baskar, Deekshetha H R, S Reshma, Vijayalakshmi M, D. Arumuga Perumal	280
48	404578	DEEP REINFORCEMENT LEARNING BASED RESOURCE ALLOCATION IN NOMA N.Iswarya, R.Venkateswari	286
49	404582	MACHINE LEARNING BASED ROBUST TECHNIQUES TO DETECT DDOS ATTACKS IN WSN Chandan, Sachin Kumar, Somnath Sinha	294
50	404583	SATELLITE IMAGE FUSION FOR OBTAINING HIGH RESOLUTION IMAGES USING DEEP NEURAL NETWORK A Nisam Rahman, Vikas Tripathi, Ayan Das Gupta, Biju Paul, Manju T Kurian, Vinodh P Vijayan	301
51	404590	RICE CLASSIFICATION AND QUALITY ANALYSIS USING DEEP NEURAL NETWORK V. Lakshmi, K. Seetharaman	307
52	404593	EARLY DETECTION AND MITIGATION OF DOS ATTACKS IN SDN CONTROLLER Saritakumar N, Anusuya K V	315
53	404594	IMPROVED DECISION BASED FILTERING ALGORITHM FOR IMPULSE NOISE REMOVAL IN DIGITAL IMAGES D.Devasena, Y.Dharshan, B.Sharmila, K.Srinivasan	323
54	404596	ATTRIBUTE-BASED MATURITY GRADING OF MANGO FRUIT BY MACHINE LEARNING S. Kripa, V. Jeyalakshmi	329
55	404597	DEEP LEARNING BASED APPROACH FOR IDENTIFICATION OF PARKINSON'S SYNDROME	335

		R Manimegalai, A Ramya, S U Swedha, M Pruthvi, S Lokesh	
56	404598	BRAIN TUMOUR SEGMENTATION USING ZERNIKE MOMENTS IN UNET	342
		K Manasa, V. Krishnaveni	