2025 3rd International Conference on Device Intelligence, Computing and Communication Technologies (DICCT 2025)

Dehradun, India
21-22 March 2025

IEEE Catalog Number: CFP25CJ9-POD
ISBN: 979-8-3315-4336-5

Copyright © 2025 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: CFP25CJ9POD
ISBN (Print-On-Demand): 979-8-3315-4336-5
ISBN (Online): 979-8-3315-4335-8

Additional Copies of This Publication Are Available From:

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

Table of Contents

S.No.	Paper Title	Authors Name	Page No.
1.	Comparative Study of Spatial Diversity Techniques in Log-normal Shadowing Channels	Raj Ranjan, Deepak Upadhyay, Mukesh Soni, Rashmi Sharma, Mridul Gupta, Nookala Venu	1 - 6
2.	Implementation of a 4:1 Multiplexer Using Compact Modeled Flexible and Low Voltage OTFT For Realizing it as a Universal Logic Gate	Mukuljeet Singh Mehrolia, Sapna Dixit, Dharmendra Kumar, Abhishek Kumar Singh, Sushma Kumari, Jogendra Singh Rana	7 - 10
3.	Innovative Approaches to Low-Cost Multiplier Design Using Approximate Computing and Clock Gating	Nihar Buxy, Dr. Shilpa D R	11 - 16
4.	Hybrid Analysis of Agent-Tesla: A Prominent Malware as a Service	Bhisham Bhanot, Vijay Kumar, Sandeep Sarowa	17 - 22
5.	A Comprehensive Review of Sn-based Perovskite Solar Cell: Structure, Optical Properties, Design and Stability	Ruchi Devlal, Praveena Rajput, Manoj Gupta, Sudakar Singh Chauhan, Priyanka Gupta, Dharmendra Kumar	23 -26
6.	A Comprehensive Review of Hybrid V2X Communication and Edge Processing Techniques for Real-Time Emergency Vehicle Detection and Prioritization in Urban Traffic Systems	Jerim Justin, Lokkeshkumar R, Vijayasri P	27 - 32
7.	A Comprehensive Overview of HEMT Structure and Fabrication Techniques	Shubham Sahu, Sudakar Singh Chauhan, Ruchi Devlal, Dharmendra Kumar, Vasista Rohanth Peela, A. M. Surya	33 - 38
8.	Exploring Explainable AI in Brain Tumor Detection: A Hybrid Approach Using EfficientNet and CBAM	Aqib Nazir Mir, Danish Raza Rizvi	39 - 44
9.	IoT Enabled Smart Metering for Domestic Electrical Distribution System Using Arduino	B Mohan, S Mahalakshmi, R Prem Ananth, J Relin Francis Raj, R Santhana Krishnan, P Sundaravadivel	45 - 51
10.	ECG Data Mining Approach for Detection of Arrhythmia Using Machine Learning	Rahema Naaz, Shafeeq Ahmad	52 - 57
11.	Development and Validation of a Four-Electrode System for Impedance-Based Moisture Measurement in Concrete and Mortar	Anamika Lata, M.K.Singh, Praveen Maurya, Siva Ramakrishna P	58 - 62
12.	YoloNet: Hybrid YOLO11 and EfficientNet for Lumpy Skin Disease Detection	Ansh Agrawal, Neze Papreja, Ayush Anand Singh, Kashish Bhurani, Sachin Minocha	63 - 67
13.	Electrode Polarization-Based Sensor for Real-Time Monitoring of Salt and Sugar Concentrations in Beverages	Anamika Lata, Praveen Maurya, M.K.Singh	68 - 72
14.	Analysis and Modeling of Electrical Parameters in OTFTs with BGTC Configuration	Chandaboina Pavan Kumar, Anamika Lata, Praveen Maurya, Manish Kumar Singh	73 - 77
15.	Design and Simulation of Dual-Gate Hybrid structure of Pentacene/Graphene for Enhanced Electrical Performance	Chandaboina Pavan Kumar, Anamika Lata, Siva Ramakrishna Pillutla, Manish Kumar Singh	78 - 82
16.	Deep Learning Based Hybrid Framework for Early-stage Prediction of Alzheimer Disease: A Predictive Analysis	Gagandeep Kaur, Sachin Ahuja, Abhishek Kumar	83 - 88
17.	Development of Deep Learning Based Model for Efficient Diagnosis of Tympanic Membrane Infection and Referrals using Otoscopic Images	Prem Abhinav Prasad, Ankit Kumar Singh, Aman Kumar Singh, Rupa Mehta, Ajay Singh Raghuvanshi	89 - 94
18.	Adaptive Portfolio Management in Volatile Markets Using Deep Reinforcement Learning	Abhishek Kumar Giri, Pradeep Singh	95 - 100
19.	Optimized Text-to-Image Synthesis Using Stable Diffusion and the Diffusers Library	B Ashreetha, Thirugudu Shiva Kumar Yadav, S Sreedhar, V M Siddeswara, Ogeti Sudharani	101 - 106
20.	A Comprehensive Study on Multiple Object Detection and Tracking in Videos under Complex Environments using Advanced Deep Learning Models	Kiran J, Ganesh D R	107 - 112
21.	Latency-Aware Network Slicing for 5G URLLC Applications: Design and Optimization Strategies	Prakhar, Deepak Upadhyay, Mukesh Soni, Shubham Gupta, Rashmi Sharma, Nookala Venu	113 - 118
22.	An Effective Method for the Detection of Tuberculosis Using Artificial Intelligence	Sandeep C S, Aswani K, Satheesh Kumar R, Keerthana G	119 - 124
23.	Automated Crop Harvesting with Robotics Using AI	Kumar P, Sangathtamil S, Sadiq Peer Mohamed K	125 - 130
24.	A Novel Secure and Scalable Framework for a Cloud-Based Electronic Health Record Management System	`Sai Srinivas Vellela, Nallapu Malathi, Shobana Gorintla, Kona Krishna Priya,	131 - 135

S.No.	Paper Title	Authors Name	Page No.
		Thalakola Syamsundara Rao, Raju Thommandru, Kolla Naga Sreenivasa Rao	
25.	Design of Pelletizer Automation based Embedded System for Soap Oil Factory	Sathish Kumar Shanmugam, Koushik Nagarajan, Ragavi Ravichandran, Manjuragavi Ramasamy, Sameera Sara Shajahan	136 - 141
26.	IoT-Enabled Machine Learning Framework for Ground Water Level Prediction in Peatland Ecosystems	Arunkumar K, Gokul S, Jagadeeshwar J, Manoj Kumar M	142 - 147
27.	Area and Delay Efficient Adders for Inexact Computing Implementation	Arunkumar K, Mallireddy Venkata Nithin Reddy, Manamasi Bhavya	148 - 152
28.	Improving Error Resilience in FPGA-Based Multi-Level Approximate Multipliers Using Modified Full Adders	Arunkumar K, S Sushma, Vangala Siva Teja	153 - 158
29.	Maximizing Efficiency and Controlling Congestion in Interlinked Queueing Models for Integrated Voice and Data Communication Networks	Amit Kumar, Prabhdeep Singh Virk, Neeraj Kumar	159 - 163
30.	Detecting Digital Financial Transaction Frauds Using CNN Model	Chadalavada Ester Rani, V. Purushothama Raju	164 - 169
31.	Morse Code Based Two-Way Communication Device for Visually Impaired and Mute	Abha Marathe, Snehal Bawanthade, Rohit Bele, Nidhi Bhagwat, Avinash Bhurke	170 - 175
32.	A Simulation Study of InP/Si Heterostructure for Sensing in the NIR Spectrum	Sanjeev Mani Yadav, Raghvendra Shukla, Manas Ranjan Tripathy	176 - 179
33.	Machine Learning Techniques to Detect a DDoS Attack in Flying Ad-hoc Network	Khushbu Jaiswal, Sudesh Kumar, Neeraj Kumar Rathore	180 - 184
34.	Efficient Sequence Modeling in Time-Domain Speech Enhancement Using MP-RNN	Himani Daulat, Tarun Varma, Krishna Chauhan	185 - 191
35.	Design and Analysis of PVT Tolerant and Fast-Settling Wideband CP-PLL Frequency Synthesizer	Archana Singhal, Dheeraj Singh Rajput, Dharmendra Boolchandani, C. Periasamy	192 - 195
36.	Netflix Recommendation System by Genre Categories Using Machine Learning	Sharda Sumedh Thete, Ramdas Popat Jare, Minal Jungare, Gauri Bhagat, Sonal Durgule, Vishal Borate	196 - 201
37.	Monitoring Students in Online Learning Environments Using Deep Learning Approach	Ritu Dudhmal, Irfan Khatik, Sachin Kadam, Surbhi Choudhary, Sachin Zurange, Vishal Borate	202 - 206
38.	Broad Band Access in Rural Areas: Bridging the Digital Divide Through Technological Innovations	Sai Nithin Rayapalli, Mir Salim UI Islam, Gone Sumanth	207 - 212
39.	Bounded Flux-Based Modelling of the Memristor and Implementation of Hybrid CMOS-Memristor Read-Write Circuit	Bachina Vamsi Krishna, Manas Ranjan Tripathy, Jogendra Singh Rana, Prince Kumar Singh, Deep Chandra Upadhyay, Satyabrata Jit	213 - 217
40.	Low Power Design Analysis of ALU Using FinFET	Sujit Suresh, Akarsha Ram, Aakash M, Prachi Sharma	218 - 223
41.	Design And Implementation of Solar Powered IoT Based Livestock Fencing With Repeller Device For Smart Agriculture	Suresh K P, Dhanasekaran A S, Dhanushsree P, Balamurugan S	224 - 229
42.	Comparative Analysis of Fault-tolerant Implementation of Quantum Logic	Mamtha Prajapati, Kalyan Babu Killana	230 - 234
43.	Advanced UART Verification Framework Using UVM and SystemVerilog	M.Bharathi, M.Dharani, D.Sharvani, V.Suchi, N.Rushitha, Y.Tejadeep Reddy	235 - 240
44.	Improvement of Power Quality of On-Board Charger for Electrical Vehicular Applications: A Review	Vipul Gupta, Bhoopendra Singh, Sachin Tiwari	241 - 246
45.	Optimizing Renewable Energy Distribution in Smart Microgrids Using IoT and Reinforcement Learning	P L Kishan Kumar Reddy, Gurumoorthi Gurulakshmanan, E.Sivanantham, Dillibai.R, Vishwa Gopalakrishnan, S. Murugan	247 - 252
46.	5G Wireless Network Security: Investigating Next-Generation Mobile Communication Data Encryption Methods and Authentication Protocols	Kiran Chand Ravi, Arokia Suresh Kumar Joseph, Satish Bojjawar, V.Samuthira Pandi, Veeraiyah Thangasamy, S. Jayanthi	253 - 258
47.	Design and validation of Mixed Logic 2-to-4 Decoders Using 32nm FinFET Technology	Ramaprabhas Penujuri, Praveena K, Mahaboob Basha Shaik, Venkata Sai Chowdary Korrapati, Dhanesh Aka	259 - 263
48.	Design and Analysis of 4-bit and 8-bit Vedic Multipliers Using Variable Bit CSLA	Siliveri Swetha, Tokala Shreya	264 - 268
49.	Remote Patient Monitoring System with Wearable IoT Devices and Biosensors for Vital Signs	S.Naveen, T.B Sivakumar, B. R. Supreeth, R.Niranjana, Vishwa Priya V, Saranya R	269 - 274

S.No.	Paper Title	Authors Name	Page No.
50.	Advanced SEPIC Converter and Fuzzy Logic Approach for RES Integration in Resilient Microgrids	Balaji V, S. L. Sreedevi, R. Baladhandapani, N K Rayaguru, Rajesh Prasad, Ananthan Nagarajan	275 - 280
51.	Smart Streetlight with Inbuilt Collision Warning System	Sakthivel Aruchamy, Rishab R, Shashank B S	281 - 285
52.	32×40 Gbps WDM based FSO Transmission System for 5G communication services	Gargi Verma, Prabhleen Kaur, Riya Rattanpal, Anju	286 - 290
53.	Design Of Instrumentation Amplifier For Pacemaker Using 180nm CMOS Technology	Nidhi Sahu	291 - 294
54.	Advancing Human Detection in UAV-Based Search and Rescue using Transfer Learning Approach	Koshika Manoj, Prabhakar Kandukuri, Murali Krishna Pole	295 - 300
55.	Orbital Angular Momentum-enabled Free Space Optics Transmission: Impact of Indian Weather Conditions	Gargi Verma, Riya, Shruti Sharma, Ritu Sharma, Sukhpreet Kaur, Tulsi Verma	301 - 304
56.	Simulative Analysis of DSP-PDM-256-QAM-enabled Free Space Optics Transmission: Impact of Rain and Fog Weather conditions	Ritu Sharma, Neetu, Harmanpreet Kaur	305 -309
57.	A simple memristor emulator using only MOSFETs and a grounded capacitor	Lakshya Makkar, Khushdil	310 - 315
58.	Color and Defect Detection in Industry Automation for Real Time Intelligent Product Sorting	Sujatha Rajkumar, Shreyas Nirgude, Ashwin Anil Kulkarni, Sumathi G, Hamid Abdi	316 - 321
59.	Autonomous Vehicle Traffic Flow Optimization Using AI and 5G Communication Networks	Jayant Shekhar, Rama Prabha K.P, S.Prashanth, Umamaheswari K, Rahul S G, K. Gayathri	322 - 327
60.	Design of 5G mm-Wave Patch Antenna with Ultra Low Return Loss using Rogers RT5880	Sristi Rawat, Yogesh Bisht, Akhil Kothari, Dr. Ajay Kumar, Banit Negi, Abhilekh Bartwal	328 - 332
61.	Machine Learning-Based Optimization of Network Security Protocols for Enhanced Threat Detection	S. Palani, A. Muthukumaravel	333 - 338
62.	Integration of Generative AI and Image Fusion for Enhanced Brain Tumor Detection in PET-MRI Data	N. Aashna Unnikrishnan, S. Arulselvi, B. Karthik	339 - 344
63.	Enhancing Women's Security with Real-Time Monitoring	M. Dharani, P. Hima Bindu, V. Mohan Krishna, P. Adarsh, P. Aparna, C. Chengamma	345 - 350
64.	Power Reduction in NOT, AND and Full Adder Circuits Using Adiabatic Methods	Prathiksha, Preksha S, Rishith Shetty, S. Shibani Hegde, Charishma Shetty	351 - 355
65.	Low-Profile Dual-Band Antenna for C-Band and X-Band Wireless Communication	Rajeswari P, Sandhya S, Lydia Jerish J, Vigneshwari G, Gopinath A, Anandan M	356 - 360
66.	Enhanced Solar PV System with Battery Storage and Grid Integration Using Cascaded ANFIS-Based MPPT and Self-Lift Luo Converter	D. Lakshmi, Sathishkumar S, R. Sreedhar, G. Vasumathi, Md Mujahid Irfan, M. Balasubramanian	361 - 366
67.	Interleaved Boost Converter with Optimized MPPT Approach for Renewable Energy Based Propulsion System of EV	Cinu S Robin, J. Raji, MD Yaseen, N. Jothippriya, Md Mujahid Irfan, I. Shivasankkar	367 - 372
68.	Genetic Algorithm Modeling and Analysis of Acyclic Coloring in High Chromatic Graphs	V. Vinitha Navis, Raja Marappan	373 - 377
69.	Comparative Analysis of Energy-efficient Approximate multiplier and Wallace Tree multiplier for Error-Tolerant Applications	Sai Tharun Petla, Venkata Sudhakar Chowdam, Priyanka Ponkala, Thrisha Nichenametla, Paramesh Polturu	378 - 383
70.	Machine Learning-Enhanced Asymmetric CPW-Fed dual band antenna for Wireless Applications	Kavitha L, Vishwa S, Yuvaprabha B, Deepika M	384 - 388
71.	Optimizing IoT Network Longevity through Super Node Integration and Multi-hop LEACH Protocol	Yash Katyayan Mishra, Manisha Bharti	389 - 394
72.	A High-Performance 64-Bit ALU for AI Applications Using Vedic Sutras and Adaptive Accuracy	Arunkumar K, Pavithra V, V.Prithyusha	395 - 399
73.	Wideband Circularly Polarized Meta-Surface based Antenna for Ka-band 5G Automotive Applications	Ashish Kumar, Ashwini Kumar, Monika Khatri, Muktak Vyas	400 - 403
74.	IOT Based Sustainable Waste Separation and Alert System	K. Vishnu Murthy, K. R. Vignesh, V. Suganth, G. A. Sanjeev Krishnaa, M. Velavan	404 - 409
75.	Faster R-CNN vs SSD: A Deep Learning Approach for Nodule Detection in Lung Cancer Diagnosis	Shital D. Bhatt, Mitesh B. Astik, Himanshu B. Soni	410 - 414
76.	Machine Learning-Based Fault Detection in VLSI Circuits	Chandrama Saha, Bushra Siddiqui, Harsh Bhoi, Sudhanya P	415 - 420

S.No.	Paper Title	Authors Name	Page No.
77.	Enhancing Congestion Management in WDM Networks: A Comparative Study of ROADM Architectures	Jenila C, Tellabati Abhinav, P. Bhargava Rayudu, G. Rajasreee, Gollapalli Tejaswini	421 - 426
78.	Keystroke Dynamics Based User Authentication Focusing on Fixed Text Approaches	Anurag Kamra, Sanya Khurana, Anurag Goel	427 - 432
79.	Analyzing Scaling Effects and Reliability Concerns in a Pre-Amplifier-Based Dynamic-Latch Comparator for Future High-Speed ADCs	Kuja Uday Sri, J. Ajayan	433 - 438
80.	Implementing an intelligent irrigation system in Oman using Machine Learning Technique	Vimal Kumar Stephen, Sanjiv Sharma, Zaina Rashid Salim Al-Jufaili, Senthil Jayapal	439 - 444
81.	AI-Powered VLSI Design Automation for Faster Chip Production in Emerging Technologies	Maheswari.S, G.G.Gokilam, S.Navaneethan, Ayman Amer, Neeraj Sunheriya, P. Sapthika Parthi	445 - 450
82.	GDI and Dynamic Logic: A synergy behind the modern electronics	Y. Parmar, N. Pandey	451 - 455
83.	Mapping Student Understanding: Analyzing Concept Maps using Network Similarity Measures	Sunu Mary Abraham, G. Sudhamathy, Sreelakshmi	456 - 461
84.	MIF-SWT-TVM: A Hybrid Multi-Modal Medical Image Fusion Using Stationary Wavelet Transform and Gradient-Based Total Variation Minimization	Shailesh Bhosekar, Prabhishek Singh, Deepak Garg	462 - 465
85.	MIF-SWT-AD: Medical Image Fusion Using Stationary Wavelet Transform, Adaptive Feature Selection and Anisotropic Diffusion	Shailesh Bhosekar, Prabhishek Singh, Deepak Garg	466 - 469
86.	A Survey on Intelligent Reconfigurable/Reflecting Surface in 6G Communication	Diya Singh, Ayush Kumar, Rohan Patil, Saurav Gupta	470 - 475
87.	Design and Analysis of a 1.2V OTA-Based Active Filters in 45nm CMOS Technology	Sharmila Banu S, Hemanth Kumar Lingam, Chinnakrishna Mekala, Mounika Maddileti, Haneefa Palagiri	476 - 481
88.	Modelling and Simulation of SPR Sensor for Skin Cancer Detection	Vinay Mohan, Amrindra Pal, Sandeep Sharma	482 - 485
89.	Theoretical study of refractive index sensing of glucose using surface plasmon resonance sensor	Vinay Mohan, Amrindra Pal, Sandeep Sharma, Rajeev Kumar	486 - 489
90.	Comparing Different Machine Learning and Deep Learning Models for Daily Rainfall Prediction at Kerala Point Location	Keshav Jha, Prashant Kumar	490 - 495
91.	Implementation of Deep Learning Algorithm to Estimate the State of Charge (SOC) of Lithium Ion Battery	M.Sasikumar, V.Indumathi, R. Gopalakrishnan, P.S.Sudhakar, S.Sridharnish, V.Sitheshwaran	496 - 501
92.	GPS-Independent Indoor Navigation-Enabled Autonomous Wheeled Robot with Obstacle Avoidance	Marrapu Vasanth Vardhan, Tadepalli hasitha Sowmya, Perumalla Yamini Priya, Shaik Nafeez wahab, B.V.Satish Babu, D. Bharadwaja	502 - 507
93.	Efficient Energy Storage System for Renewable Energy Source Integration to Grid	S. Tamilselvi, Manikandan L, Gowtham B, Pradeep N, Karthikeyan S	508 - 513
94.	Deep-learning based Aspect Sentiment Classification for low-resource language	Ashwani Gupta, Utpal Sharma	514 - 518
95.	Optimizing Machine Learning Algorithms for Accurate Heart Disease Detection	SM Faizanut Tauhid, Safdar Tanweer, Md. Tabrez Nafis, Mohd Abdul Ahad, Syed Mohd Faisal Malik, Syed Sibtain Khalid	519 - 524
96.	A Minimalist MOS-based Meminductor Emulator Circuit	Rahul Kumar Gupta, Mahipal Singh Choudhry, Varun Saxena	525 - 530
97.	Hybrid GAN-based Transfer Learning Model for Advanced Threat Detection in Cloud Computing	Agha Salman Haider, Md Tabrez Nafis, Ihtiram Raza Khan, Syed Taha Owais, Nida Fatima	531 - 535
98.	Fidelity Analysis Under Different Noise Condition for Single Qubit Quantum Teleportation	Manisha Prajapat, Kamal Kishor Choure, Rahul Pandey, Ghanshyam Singh, Shehul Singh, Pukhrambam Puspa Devi	536 - 540
99.	Mod-ViT: A Vision Transformer-Based Framework for Breast Cancer Detection from Multiple Imaging Modalities	Iqra Nissar, Shahzad Alam, Sarfaraz Masood	541 - 546
100.	Automatic Modulation Recognition Using Modified Convolutional Neural Network	Brahmjit Singh, Poonam Jindal, Pankaj Verma, Vishal Sharma, Chandra Prakash	547 - 550
101.	Plasmonic Sensor with Interconnected Dual Ring Resonator for Refractive Index Sensing	Rahul Pandey, Kamal Kishor Choure, Manisha Prajapat, Ghanshyam Singh, Rajendra Mitharwal	551 - 555

S.No.	Paper Title	Authors Name	Page No.
102.	Crow Search Algorithm for Energy-Efficient UAV Path Planning in Large-Scale Aerial Surveys	S.Amutha, S.V.Ramanan, Selvendran Ganesan, B.Leena, Akshya. J, Mani Deepak Choudhry, M.Sundarrajan	556 - 561
103.	Development of Generic Custom FILL	Tanu Shree Gothwal, Bharat Choudhary, Dheeraj Singh Rajpiut	562 - 567
104.	Surface Plasmon Resonance-Based Optical Biosensors for Refractometric Sensing: A Theoretical Review	Himanshu Prasad Singh, Jai Singh, Indranil Mukherjee, Shivam Singh	568 - 573
105.	HEMT based Different Structures for High Threshold and Breakdown Voltages: A Review	Aastha Singh, Sachin Dhariwal	574 - 581
106.	Design and Implementation of LUT Based Approximate Multiplier for Energy-Efficient Computing	Silpa Kesav Velagaleti, Sujay Malraju	582 - 586
107.	Design and Analysis of Log Periodic Slotted Tri- Band Antenna for Wearable Applications	Regina S, Kiruthika R, Keerthana J, Ramya R	587 - 592
108.	Performance Analysis of Regular Polygonal Patch Antennas for Band Classification Using Machine Learning	Mitesh Upreti, Sanjay Mathur	593 - 597
109.	Deep Learning-based Blind Identification of Channel Coding Schemes	Brahmjit Singh, Shalu	598 - 602
110.	Faces in the Fog: A Deep Dive into Face De-identification Techniques and Their Comparative Analysis	Shaonti Goswami, Sudipty Konica Paul, Sanyam Jawlia, Anurag Goel	603 - 608
111.	A Comparative Study of Large Language Models: ChatGPT, DeepSeek, Claude and Qwen	Rupesh Phogat, Dheeraj Arora, Pawan Singh Mehra, Jatin Sharma, Diksha Chawla	609 - 613
112.	A Review on Energy-Efficient PCF Based Plasmonic Biosensors for Biosensing Applications	Shuddhatm Gaur, Shubh Goel, Monal Sharma, Shivam Singh	614 - 619
113.	Automated Detection and Classification of Pulmonary Lung Diseases Using Falcon Optimized BiLSTM Approach	Balaji A, Brintha Rajakumari S	620 - 625
114.	Quantum Edge Cloud Computing: Revolutionizing IoT	Aanya Tiwari, Ahsaan Ahmad Ahanger, Anjali Meena, Pawan Singh Mehra	626 - 631
115.	Modeling and Analysis of a Microfluidic Biosensor for Selective Cell Control in Lab-on-Chip Applications	Medhavee Moon, Drashti Charpot, Mahesh Kumar, Satya Narayan Agarwal	632 - 636
116.	A Hybrid Approach to Feature Selection for Cyber Threat Detection in IoT Networks	Mohammad Ubaidullah Bokhari, Mohd Zain Khan, Faheem Syeed Masoodi	637 - 642
117.	Design and Implementation of Efficient 32-Bit Vedic Multiplier	Suvansh Gupta, Siya Sharma, Keiya Singh, Nawaz Shafi	643 - 648
118.	Development of Piezoelectric Sensor Using PVDF/PMMA/PSSA Blend	Akshat Bhatt, Mamta Sharma, Varij Panwar, Priya Khanduri	649 - 652
119.	Improved Positive Feedback Source Coupled Logic Based Tri-State Buffer and Its Applications	Ruchi Bhaskar, Bharat Choudhary, Rajesh Saha, Dheeraj Singh Rajpiut	653 - 657
120.	Enhancing Lung Cancer Detection: A Framework for Lung Parenchyma Segmentation and Classification Using Transfer Learning	Takreem Fatima Khan, Swaleha Zubair, Mohd Zain Khan	658 - 663
121.	Design and Analysis of a 1-Bit Full Adder Utilizing a Novel Grounded Keeper XOR-XNOR Circuit	Pallavi Chauhan, Abhishek Tomar, Neha Singh	664 - 668
122.	A Deep Autoencoder based Outlier Detection model for Intrusion Detection Systems in Wireless Sensor Networks	Shourya Shukla, Ajay Singh Raghuvanshi, Saikat Majumder, Shalini Singh	669 - 674
123.	FPGA Implementation of Floating-Point Multiplier Employing Carry-Lookahead Adders	Abhay Sharma, Md. Irfanul Hasan, Devesh Tiwari	675 - 678
124.	Design Innovations in TFETS: Enhancing Performance and Sensitivity through Charged Plasma, Dual-Gate, and Work Function Techniques	Kaushal Kumar, Challa Harshavardhan Reddy, Dasari Ramesh Babu, Vinay Kumar, Ajay Kumar, Aditya Jain	679 - 683
125.	Efficiency Optimization of Cu2O/CsSnGeI3/IGZO Perovskite Solar Cell using Simulation	Chandni Tiwari, Varun Mishra, Umer Ansari	684 - 687
126.	Enhanced Thermal Object Tracking in Search and Rescue Missions Using Adaptive 3D Kalman Filtering	Harsh Kumar Upadhyay, Vaibhav Singh, Vikram Bali, Sarvagya Pandey, Vandna Verma, D. K. Nishad	688 - 693
127.	Automated Disease Detection of Rice Crops Through Video Recognition	Poorva Vishnoi, Abhishek Jaiswal, Kirti Patel, Vandna Rani Verma	694 - 697
128.	Towards Energy-Efficient Optimized Localization in Wireless Sensor Networks	Hina Singh, Preeti Yadav, Mano Yadav, Abhishek Gautam, Ashutosh Shankhdhar, Vinay Rishiwal	698 - 703