# **2021 6th International Conference** on Signal Processing, Computing and Control (ISPCC 2021)

Solan, India 7-9 October 2021



IEEE Catalog Number: CFP2156S-POD **ISBN:** 

978-1-6654-2555-1

#### **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:	CFP2156S-POD
ISBN (Print-On-Demand):	978-1-6654-2555-1
ISBN (Online):	978-1-6654-2554-4
ISSN:	2376-5461

#### 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**

PAPER ID	TITLE	Authors	Page No.
1	Voice Controlled Robotic Car Using Mobile Application	Shiropa Chakraborty, Nilotpal De, Divine Marak, Mithu Borah, Sudip Paul, Vinayak Majhi	1-5
2	Band notched polarization insensitive simple FSS for electromagnetic shielding	Kanishka Katoch, Naveen Jaglan, Samir Dev Gupta	6-9
3	An Efficient Encryption-Authentication Scheme for Electrocardiogram Data using the 3DES and Water Cycle Optimization Algorithm	Nisha Raheja, Amit Kumar Manocha	10-14
4	A study on Artifacts Removal from Physiological Signals	Suraj Prakash, Amit Kumar Manocha, Mandeep Singh	15-20
5	A Design of Customer Service Request Desk to Improve the Efficiency using Robotics Process Automation	Nitin Goyal, Harpreet Singh	21-24
6	Workflow Automation for Implementing Customer Service Request Desk in Hotel Industry	Nitin Goyal, Harpreet Singh	25-28
7	Compact ten element antenna array for thin 5G smartphone applications	Vishakha Thakur, Naveen Jaglan, Samir Dev Gupta	29-33
8	Future Aspects on MEC (Mobile Edge Computing): Offloading Mechanism	Aarti Sharma, ChanderDiwaker	34-39
9	Review on application of Drone systems in agriculture	Supriya Sharma, Shiksha Solanki, Kavita Aswal, Ekta Thakur, Isha Malhotra	40-45
10	Medical Handwritten Prescription Recognition and Information Retrieval using Neural Network	Utkarsh Shaw, Tania, Rishab Mamgai, Isha Malhotra	46-50
11	Operational Challenges in Online Self- Learning Education Adoption	Ramneet, Deepali Gupta, Mani Madhukar	51-55
12	Design and Optimization of Compact Wideband Patch Antenna using Genetic Algorithm for WLAN Communication	Ankush Kapoor, Ranjan Mishra	56-61

13	1X4 Cross-Orthogonal Series-Fed Two-Dipole Array Antenna with Parasite Directors for the 4G Radome Applications	Mohd.Wasim, ShelejKhera	62-65
14	FPGA based ECG Denoising:Current Status and Future Technologies	Abdul Moiz, Aditya Gupta, MD Ashhar Akhtar, Niket Agarwal, Kirti	66-71
15	A Review on Protein Subcellular Localization Prediction using Microscopic Images	Sonam Aggarwal, Sheifali Gupta, Rakesh Ahuja	72-77
16	Analysis of Multiple Classifiers for Herbal Plant Recognition	Priya Pinder Kaur, Sukhdev Singh	78-83
17	Recognition of Various Scripts Using Machine Learning and Deep Learning techniques-A Review	Sandhya Sharma, Sheifali Gupta	84-89
18	KAS-IDS: A Machine Learning based Intrusion Detection System	Jasmeen Kaur Chahal, Vidhyotma Gandhi, Payal Kaushal, K.R. Ramkumar, Amanpreet Kaur, Sudesh Mittal	90-95
19	Recent trends in Smartphone antenna design for 5G applications	Diksha Thakur, Naveen Jaglan, Samir Dev Gupta	96-100
20	Enhancing 3D implicit shape representation by leveraging periodic activation functions	Kanika Singla, Parmanand Astya	101-106
21	Impact of SiO2 Isolation in Ge/Si Tunnel Field-Effect Transistors	Sweta Chander, Sanjeet Kumar Sinha	107-110
22	Review of Joint Encoding and Encryption for Image Transmission using Chaotic Map, LDPC and AES Encryption	Kanchan Yadav, TrushitaChaware	111-115
23	Analysis of BER , FER in the coexistence scenario of 4G LTE and 5G NR	Jayanta Kumar Ray, Rabindranath Bera, Sanjib Sil, Quazi Mohmmad Alfred	116-121
24	Design And Implementation of Artificial Intelligence (AI) based Home Automation	Rashmi Vashisth, Nikhil Aggarwal, DivijSanduja, Mehul Manhas	122-126
25	Design and Development of Smart Cart System using Artificial Intelligence	Anushka, Vishu Mishra, Shivani Bhardwaj, Rashmi Vashisth	127-130

26	Security and privacy in IoT, Cloud and Augmented Reality	Vidhyotma Gandhi, K.R.Ramkumar, Amanpreet Kaur, Payal Kaushal, Jasmeen Kaur Chahal, Jaiteg Singh	131-135
27	Detection and Recognition of Hand Gestures for Indian Sign Language Recognition System	Mitashi Bansal, Sumita Gupta	136-140
28	COVID-19 Face Mask Detection Using Deep Learning	Trisiladevi C. Nagavi, Sharanya R. B., Minchu S., Raja Kumar, Manuprasad	141-145
29	Ambulance Booking Application	Arunachalam PL, Krishna P, Vignesh M, Tina Susan Thomas	146-149
30	A Study of Relevant Parameters influencing the Code Smell Prioritization in Object-Oriented Software System	Renu Verma, Kuldeep Kumar, Harsh K Verma	150-154
31	An NHPP-Based SRGM with Time Dependent Growth Process	Md. Asraful Haque, Nesar Ahmad	155-158
32	Consensus Algorithms in Blockchain Technology	HemlataKohad, Sunil Kumar , Asha Ambhaikar	159-164
33	Implementation of Approximate Multiplier using Inexact Compressors	Garima Thakur, Harsh Sohal, Shruti Jain	165-170
34	Security Challenges and Issues in IoT	Sanjeev Kumar, Sukhvinder Singh Dearo	171-175
35	IOT Big Data Analytics in Healthcare: Benefits and Challenges	Kushwant Kaur, Sahil Verma, Ankit Bansal	176-181
36	Conducting Field Programmable Gate Array experiments using Augmented Reality and Virtual Reality: A Review	Amanpreet Kaur, Archana Mantri, K.R.Ramkumar, Bhanu Sharma	182-185
37	Highly Compact Triple Ring Slotted Circular Polarised Implantable Antenna forBio-medical Applications	Rajiv Kumar Nehra, N S Raghava	186-190
38	Efficiency Enhancement of Different Machine Learning Approaches Through the Impact of Preprocessing Techniques	Vineeta Gulati, Neeraj Raheja	191-196

	1		
39	Digital Education Challenges and Opportunities	Geeta Rani, Puninder Kaur, Taruna Sharma, Avinash Sharma	197-202
40	A Slotted Hexagonal 4×4 MIMO Antenna with Tapered feed Designed for High Speed IoT Wireless Applications	Manish Sharma, NamrataChoudhary, Naveen Kumar, SN Panda, Rajesh Kaushal	203-208
41	2×2 MIMO Antenna Design & Analysis Strategies: A systematic Review and Classifications	Manish Sharma, Harsh Malhotra, Suvarna Sharma, S N Panda	209-212
42	Dual Band Circularly Polarized Compact Implantable Antenna Using Shorting Pin	Aarushi, Ayushi Singh, Sonal Jha, Rajiv Kumar Nehra, N S Raghava	213-217
43	Design and Development of Graphical User Interfaces for Detection of Forest Fires at early stages using Open Source Technologies	Jaskaran Singh, Chandan Taluja, Vijaya Choudhary, Kailash Chand, Paramita Guha	218-222
44	Corpus Design Challenges and Analysis of Acoustic Information for Automatic Dialect Classification	Ashima Arora, Amitoj Singh, Virender Kadyan	223-227
45	An Enhanced Clustering Algorithm for Agricultural Data Using FAO Heuristics	Shivi Sharma, Hemraj Saini	228-232
46	Stripe Noise Removal from Remote Sensing Images	P.Mohana Satya, Samudrala Jagadish, V. Satyamaravana, Mahesh K Singh	233-236
47	Applications of Statistical Machine Learning Algorithms in Agriculture Management Processes	Karri Divya Jyothi, M.S.R.Sekhar, Sanjeev Kumar	237-241
48	Lens less Cameras for Face Detection and Verification	R. L. Anushka, Samudrala Jagadish, V.Satyanarayana, Mahesh K Singh	242-246
49	A Large Scale Video Retrieval by Image Queries: An Efficient Approach	D. Chandra Mouli, G.Varun Kumar, S. V. Kiran, Sanjeev Kumar	247-250
50	Circuits Based on the Memristor for Fundamental Operations	A.Nandini, R. Anil Kumar, Mahesh K Singh	251-255
51	Design and Comparative analysis of Mux Tree using Different Low Power Design Techniques	Kanika Sharma, Ashwni Kumar	256-261

52	Smart Hardware Development under Industrial IOT (IIOT) 4.0: A Survey Report	Vinay Bhatt , Amit Kumar Bindal	262-265
53	An innovative Schematic design to Customize Blowfish for Better Security	Shally Nagpal, Suneet Kumar	266-271
54	loT Based Energy Efficacious Smart Hygiene System	Tejal Rajendra Patil, B. Naga jayanthi, Aditya Chennareddy	272-277
55	Analysis of Static power reduction strategies in Deep Submicron CMOS device Technologies for Digital circuits	G. Munirathnam, Y. Murali Mohan Babu	278-282
56	Error Detection and Correction in TCAMS Based SRAM	Suman Mishra, K.Radhika, Y.MuraliMohanBabu	283-287
57	Third Vision for Safeguarding Women Witha Live Surrounding Update using Deep-Learning For Computer Vision	Abilash M R, Balaji V, Sayee Darshan J K, Anju A	288-292
58	Breast Cancer Prediction In Machine Learning Techniques Using Blockchain	R.Anand, Aneeshsa D, ManishaSrinidhi M, Thanuja R.K.V	293-298
59	A GUI based application for Low Intensity Object Classification & Count using SVM approach	Vishal Gupta, Nikhil Marriwala, Monish Gupta	299-302
60	Missing Values Imputation in Food Consumption: An Analytical Study	Ashok Kumar Tripathi, Hemraj Saini, Geetanjali Rathee	303-307
61	A Critical Analysis of Apache Hadoop and Spark for Big Data Processing	Piyush Sewal, Hari singh	308-313
62	Automatic Detection of Cowpea leaves Using Image Processing and Inception- V3 Model of Deep Learning	Vijaya Choudhury, Paramita Guha, Kuldeep Tripathi, Sunita Mishra	314-318
63	Leveraging deep learning algorithms for classification of tomato leaf diseases	Karanjeet Singh, Prashant Rai, Kanika Singla	319-324
64	Effect of Random Mobility on the Performance of an Energy Efficient Fermat Point Based Geocast Routing Protocol for Wireless Adhoc and Sensor Networks	Kaushik Ghosh	325-329

65	On the Move Passive Localization of Access Points Based on Received Signal Strength of IEEE 802.11 Probe Frames: A Heuristic Method	Kaushik Ghosh, Ajay Prasad	330-335
66	Save the Earth: Teaching Environment Studies using Augmented Reality	Bhanu Sharma, Narinder Pal Singh, Archana Mantri, Shubham Gargrish, Neha Tuli, Shivam Sharma	336-339
67	A Novel Sybil Attack Detection and Prevention Mechanism for Wireless Sensor Networks	Charu Sharma, Rohit Vaid	340-345
68	A Comprehensive Review on Clustering in WSN: Optimization Techniques and Future Research Challenges	Abha Sharma, Prasenjit Das, R B Patel	346-351
69	Juxtaposing Deep Learning Models Efficacy for Ocular Disorder Detection of Diabetic Retinopathy for Ophthalmoscopy	Subhash Arun Dwivedi, Amit Attry	352-357
70	Classification of Heart Disease from MRI Images Using Convolutional Neural Network	Ajay Sharma, Raj Kumar, Varun Jaiswal	358-363
71	Design of memristor based logic gates for low power wireless sensors in biomedical applications.	Anudeep Peddi, Sudhanshu Reddy Polam, Kalyana Srinivas K, Sravanth Kumar R, Saadia Hassan	364-367
72	Infection Segmentation of Leaves Using Deep Learning techniques to enhance crop productivity in smart agriculture	NikhithaKarennagari, G. Vijaya Kumar, Kalyanasrinivas, Yashwanth Reddy K, Anudeep peddi, Padma Sai. Y	368-372
73	Skin Pathology Detection Using Artificial Intelligence	SamardhVadupu, Kalyana Srinivas Kandala, Anudeep Peddi, N.Sudhakar Yadav, G. Vijaya Kumar, P. A. Harsha Vardhini	373-376
74	EAR-based Biometric System Using Artificial Intelligence	R. SathyaKrishna, KalyanaSrinivasKandala, Anudeep Peddi, N Sudhakar Yadav, P. kishore, P. A. Harsha Vardhini	377-382
75	Artificial Intelligence Based Algorithms for Driver Distraction Detection: A Review	Boggula Varun Kumar, Kalyana Srinivas Kandala, Anudeep Peddi, N.Sudhakar Yadav, G. Vijaya Kumar, P. A. Harsha Vardhini	383-386
76	Strategic Sleeping of Visible Light Communication Access Point	Vishal Kumar, Akash Gupta, Parul Garg	387-392

77	Automatic Evaluations of Human Blood Using Deep Learning Concepts	Elizabeth Rani. G, Harini Mohan, Bendela Kusuma, P Shiridi Kumar, Ardhala Mounika Jenny, NukalaAkshith	393-396
78	Trigonous Sheilding System For Women	Sakthimohan. M, PacchaRuchitha, KaipuJefhanyaHarshitha ,BaldarTharuni, Elizabeth Rani. G, Deny. J	397-401
79	Classification of Alzheimer's disease using Neuroimaging Data by Convolution Neural Network	Monika Sethi, Sachin Ahuja, Puneet Bawa	402-406
80	IoT based Smart Applications and Recent Research Trends	Ishita Seth, Surya Narayan Panda, KalpnaGuleria	407-412
81	A Systematic Analysis of Applications Of Blockchain in Healthcare	Ambuj Kumar Agarwal, Raj Gaurang Tiwari, Rajesh Kumar Kaushal, Naveen Kumar	413-417
82	Rice Leaf Disease Detection: A Review	Amandeep Kaur, KalpnaGuleria, Naresh Kumar Trivedi	418-422
83	Securing Copyright of Digital Video by Exploiting Quantized DC coefficients	Rakesh Ahuja, Amandeep Kaur, Ambuj Kumar Agarwal, Manish Sharma, Vikas Lamba, Vinay Kukreja	423-427
84	rophetic Analysis of Bitcoin price using Machine Learning Approaches	Raj Gaurang Tiwari, Ambuj Kumar Agarwal, Rajesh Kumar Kaushal, Naveen Kumar	428-432
85	Efficient Task Scheduling Technique under Batch Mode Heuristic for Cloud Environment	Puneet Banga, Sanjeev Rana	433-437
86	Social Distancing Inspection To Mitigate COVID-19 Using K- Nearest Neighbour	Rutuparnna Mishra, AnshitRansingh, Sujata Chakravarty, Satyabrata Dash	438-443
87	Hyper-Parameters Tuning for Hyperspectral Image Classification	Sai SwagathChava, Satya Lakshmi TejaswiniGunnapaneni, Sujata Chakravarty	444-449
88	Design of Global Interconnects using Adiabatic Dynamic Logic employing FinFET Technology	HimaniBhardwaj ,Shruti Jain , Harsh Sohal	450-455
89	A Classification Approach for Heart Disease Diagnosis Using Machine Learning	J Rethna Virgil Jeny, Nalla Sreeja Reddy, P.Aishwarya, Samreen	456-459

90	Text Summarization and Trend Evaluation	P Kiran Kumar, Sreeja Reddy K, G Uday Kumar, K Sai chand Reddy	460-464
91	IoT based Smart Healthcare Monitoring Systems: A Review	DivyanshuTiwari , Devendra Prasad, KalpnaGuleria, Pinaki Ghosh	465-469
92	Hyperspectral Image Classification using SVM with PCA	Mounika.K, K.Aravind, M.Yamini , P.Navyasri, Satyabrata Dash, Vadhri Suryanarayana	470-475
93	Design of cloud-based interoperable electronic health record with advanced security for Indian healthcare industry	Tejashwa Kumar Tiwari, Apoorva Tyagi ,Gunseerat Kaur , SumitBadotra	476-481
94	Encryption Algorithms based on Security in IoT(Internet of Things)	Gurpreet Singh, Amanpreet Kaur	482-486
95	Eye movement with zoom Feature for HCI	Rupali Gawande, SumitBadotra	487-490
96	Mobile Cloud Computing - Enabling Technologies and Applications	Ajay Sudhir Bale, Arushi Gupta, Prajwal R, Manoj R, Mahesh Gowda M S, Anandhakumar Ramasamy, Aditya Khatokar J	491-496
97	Effect of Harvard Step Test on blood pressure of sportspersons.	Subhash Chand, Monika Verma , Amit Kumar Manocha	497-500
98	Condition Monitoring of Machinery A Case Study	Piyush Samant, MeghaBhusha, Sharad Tiwari, Ashok Kuma, ReshamAry, Sakshi Bansa	501-505
99	Approaches on Medical Image Watermarking Using Big Cordial Data in Network of Network	Prashant Kumar, Sachin Gupta, Rajeev Ratan	506-511
100	New Ultrasound Image watermarking Enhancement algorithm for cardiovascular disease	Prashant Kumar, Sachin Gupta, Rajeev Ratan	512-517
101	A Compact Circularly Polarized Direct- coupled Dual EMSIW Antenna	Sayyed ArifAli , Muhammad shah alam, Mohd Wajid	518-521
102	Direct Quadrate Modelling of a Direct Torque Control for a 3-Phase Induction Motor	Ayodeji Olalekan Salau, Tesfaye MeberateAnteneh	522-527

103	Designing of Low Power Clocking Scheme Based Energy Revival Sense Amplifier Flip-Flop	Tripti Sharma	528-532
104	Analysis of Legal Case Document Automated Summarizer	Ankur Goyal, Naimoonisa Begum	533-538
105	A Comprehensive Study Forthe Hindi Language to Implement Supervised Text Classification Techniques	Vijay Kumar Soni, Smita Selot	539-544
106	Scheduling Optimization in Cloud Computing: Review and Issues	Akwinder Kaur	545-549
107	Optimized Perovskite Solar Cell Design using Suitable Defects in Layers for Enhanced Efficiency	Km Shiwani, Rajesh Mehra, Simran Malhotra, Meenakshi Sood	550-555
108	Design and analysis of Smart Shoe for Women Safety in different Terrain	SaranshRohilla, Sannidhya Yadav, Nishant Jain	556-560
109	A Novel hybrid deep learning algorithm for smart city traffic congestion predictions	L. M. I. Leo Joseph, Ashish Jain, Kamal Gulati , Pankaj Goel, K Rajyalakshmi, Prithvipal Singh	561-565
110	The Architecture, Classification, and Unsolved Research Issues of Big Data extraction as well as decomposing the Internet of Vehicles (IoV)	Sunil L. Bangare, Kamal Gulati , Gaurav Dhiman, Sunny Prakash, B. Veeru, Sushma Jaiswal	566-571
111	Artificial Intelligence enabled cyber security	Ankush Mehra, SumitBadotra	572-575
112	Comparative Analysis of Conventional and Adaptive beamforming for Linear Array	Mahima Singh, Mohd Wajid	576-580
113	Real Time Surveillance for Identification of Fruits Ripening Stages and Vegetables Maturation Stages with Infection Detection	K.Jaspin, Shirley Selvan, J.Dafni Rose, Jeswin Ebenezer, Arun Chockalingam	581-586
114	A Survey on Andro-Financial Malware Attacks, Detection Methods and Current Issues	Tanya Gera, Jaiteg Singh, Deepak Thakur, Amandeep Kaur	587-593
115	Efficient Multiplier Architecture for ECC Core	Gutti Naga Swetha, Anuradha M.Sandi	594-599

116	Security Requirements in Internet of Things: Challenges and Methods	VineetaSoni, SamriddhiKoolwal, SahitiBalantrapu, Devershi Pallavi Bhatt, Narendra Singh Yadav	600-604
117	A Note On Absolute RieszSummability Factors	SmitaSonker, Rozy Jindal	605-608
118	Fuzzy Logic on Long Short-Term Memory for Smart Person-Identification System through Electroencephalogram	SubhrangshuAdhikary, Kushal Jain, Biswajit Saha, Chandan Koner	609-613
119	A Comprehensive Review on Encryption based Open Source Cyber Security Tools	Ritik Sharma, SarishmaDangi, Preeti Mishra	614-619
120	A Survey on Classical and Optimized Hierarchical Routing Protocols for IoT and WSN	Kirtidev Mohapatra, Rakesh Ku. Lenka, Suraj Sharma	620-624
121	Future Tactile Internet: Issues, Challenges and Applications	Suman Bera, Hiresh Das, Sabuzima Nayak, Ripon Patgiri	625-630
122	Performance Analysis of TCP Queues: Effect of Buffer Size and Round Trip Time	Lokesh Bommisetty	631-635
123	A Quantum Approach to Walk on Networks	Anurag Singh, BinshumeshSachan	636-643
124	Vision Transformer based COVID-19 Detection using Chest X-rays	Koushik Sivarama Krishnan, Karthik Sivarama Krishnan	644-648
125	An Efficient Sports Classification Technique Incorporating CNN Transfer Learning Models	Yeaminur Rahman, RezwanaMahfuza, Md. Abdul Hai	649-653
126	A Comparative analysis of Early Stage Diabetes Prediction using Machine Learning and Deep learning Approach	Md Abu RummanRefat, Md. Al Amin, Chetna Kaushal, Most NilufaYeasmin, Md Khairul Islam	654-659
127	An Efficient Temporal Feature Aggregation of Audio-Video Signals for Human Emotion Recognition	Lovejitsingh, Sarbjeet Singh, Naveen Aggarwal, Ranjit Singh, Gagan Singla	660-668
128	QoE-based Resource Management of Applications in the Fog Computing Environment using AHP Technique	Shefali Varshney, Rajinder Sandhu, P. K. Gupta	669-673

129	Deep Learning to Detect Plant Diseases	Rajiv Kumar	674-677
130	Soft Security Resource Scheduling Issues in Cloud Computing: A Review Computing: A Review	Himanshu, Neeraj Mangla	678-684
131	Analysis of heart risk prediction in machine learning using Blockchain	R. Anand, Fazlul Kareem S, Mohamed Arshad Mubeen R, Ramesh S, Vignesh B	685-689
132	Web Application FOR RTO Vertification System	Hari Krishnan.S, Sathish. G, Arish Narayanan. V, R. AdlineFreeda	690-693
133	Intrusion Detection Systems: Conceptual Study and Review	CharviVij, Hemraj Saini	694-700
134	Various Heuristic Fault Tolerance Routing Protocols and Factors in IoT Wireless Sensor Network	Vandana Devi, Rajiv Kumar, Vinod Kumar	701-707
135	Metamaterial Loaded Dual-Band Circularly Polarized Compact Implantable Antenna with and without Shorting pin	Ayushi Singh, Sonal Jha, Rajiv Kumar Nehra, Aarushi, N S Raghava	708-714
136	A Protected Cloud Information Sharing Convention for Big Business Supporting various Leveled Catchphrase Search	Gowri Manohar S, Mohana Krishna Kumar A, Visweswaran K, R. AdlineFreeda	715-718
137	Ontology based data integration for adverse drug reaction	Monika Yadav, Vijendra Singh, Prachi	719-727
138	An Image Processing Techniques For Pattern Detection in COVID-19	Simran Kaur, ChanderDiwaker	728-735
139	Assessment of Ground Water Hydrology by Resistivity Technique In The Area of Motika Bas 1 &Motika Bas 2, Rajasthan, India	Neelam Devi, Sukhdeep	736-740
140	Role of Data Analysis in Higher Education	Sidharth Gautam	741-744
141	Investigation of Visible Light Communication in an Indoor Environment: A Case Study of Afe Babalola University's Communication Laboratory	Olawale Joshua Olaluyi, Ayodeji Olalekan Salau, Israel Esan Owolabi	745-749

142	Role of Internet of Things and Machine Learning in Precision Agriculture: A Short Review	Dushyant Kumar Singh, Rajeev Sobti	750-754
143	A Computational Analysis to Model Thermal and Non-Thermal Behavior of the Microwave Drying Process for Apple Fruit	Anita Rani, Bhawna Sharma, Chanpreet Singh, Nitin Saluja, Geetanjali	755-759
144	Crime Scene Analysis Using Deep Learning	P. Mahesha, Royina K. J., Sumi Lal, Anoop Krishna Y., Thrupthi M.P.	760-764
145	Wireless Communication Technologies for Internet of Things and Precision Agriculture: A Review	Dushyant Kumar Singh, Rajeev Sobti	765-769
146	Review on Different Energy EfficiencyTechniques in Cognitive Radio Networks	Mahak Kalra, Anil Vohra, Nikhil Mariwala	770773
147	Rigid Wrap ATM Card Security Breach Using Multistage Detection	Manish Thakral, Rishi Raj Singh, Ayur Jain, Gunjun Chhabra	774-778
148	GAMEOP: Software Quality Management Approach for Gaming Industry	Ayushi Teotia, Shelly Garg	779-784
149	Maximum Likelihood Decoder For Image Watermarking Techniques	Preeti Sharma	785-788
150	An Extensive Systematic Review of RFID Technology Role in Supply Chain Management (SCM)	V.P.Sriram, Kolachina Srinivas, Guna Sekhar Sajja, K. Bhavana Raj, HarikumarPallathadka, Kamal Gulati	789-794
151	Assessment of Load Balancing Techniques in Cloud Computing	Ajay Jangra, Himanshu Dubran	795-798
152	AI & ML Enabled Analytics Techniques For Improving The Quality of Website	S.S. Aravinth, B. Mouleswara Rao, A. M. Senthil Kumar, A. Arul Prsath	799-803
153	Mobile Dimensions Detection For Forensic Investigation	Sarang Sharma, Sheifali Gupta, Rakesh Ahuja, Deepali Gupta	804-810
154	Block Chain Based Cognitive Wireless Networks: Challenges& Applications	SimranTaneja, Nikhil Marriwala	811-816
155	Smart Shuttle Based Transformation system for Smart Cities	Neil Francisco Araujo, Rajkumar Rajasekaran, Vijendra Singh	817-821