2018 International Conference on Advances in Computing, Communication Control and Networking (ICACCCN 2018)

Greater Noida, Uttar Pradesh, India
12-13 October 2018

Pages 1-595

IEEE Catalog Number: CFP18081-POD
ISBN: 978-1-5386-4120-0

Copyright © 2018 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:	CFP18O81-POD
ISBN (Print-On-Demand):	978-1-5386-4120-0
ISBN (Online):	978-1-5386-4119-4

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

Track-1

Evolutionary Computing, Distributed and Parallel Processing, Cloud and Green Computing, IOT, Data Mining, Advance Database Management System

S.No.	Paper ID	Paper Title	Page No
1	6	**Pragmatic Approach Using OAuth Mechanism for IoT Device Authorization in Cloud** *Seung-Hwa Chung, Jee Hyeok Kim, Young Jin Kim*	1
2	65	**A Survey on Adaptive Cloudlet Placement Methods for Mobile Applications in Wireless Metropolitan Area Networks** *Neha Kirar, Mayank kumar Mittal, Jasraj Meena*	5
3	246	**Hetrogenous Computing Task Scheduling Using Improved Harmony Search Optimization** *Mayur Agrawal, Rishabh Bansal, Ankur Choudhary, Arun Prakash Agrawal*	11
4	260	**Analysis of Cryptographic Algorithms for IoT Security** *Varsha Raghav, Supriya Raheja*	16
5	285	**A Critical Analysis of Sensor based IoT Architectures using Fuzzy Topsis** *Neeti Gupta, Vidushi Sharma, Monika Kashyap*	21
6	329	**IoT based Smart Helmet System with Data Log System** *Manish Uniyal, Himanshu Rawat, Manu Srivastava, Vivek Kumar Srivastava*	28
7	346	**An Approach to Sentiment Analysis of Twitter Data on the Goods and Services Tax** *Shubham Roy, Samarth Sehgal andShantanu Agrawal*	32
8	350	**Extending Port Forwarding Concept to IoT** *Nidhi Verma, Monika Kashyap, Apurva Jha*	37
9	358	**Hybrid Cryptosystem based Security in Cloud Computing** *Aanchal Khatri, Vishal Khatri, Mansi V Goenkar, Ritu Singh, Sakshi Sharma, Priyanka Grover*	43
10	402	**Intelligent Embedded Security control system for Maternity ward based on IoT and Face recognition** *Stuti Mehra, Aanchal Khatri, Poonam Tanwar, Vishal Khatri*	49
11	428	**Trending Topics based Spam Detection from the Social Media** *Aditi Gupta1, Neetika Raina, Bharti Jha,Vinay Kumar Jain*	54
12	475	**A Privacy Framework in Cloud Computing for Healthcare Data** *Mayank Kumar Kundalwa, Ashish Singh, Kakali Chatterjee*	58
13	566	**Virtualization in Cloud Computing- A Study** *Manjeet Singh*	64

Track-2

Big Data, Data Analysis, Machine Learning and Artificial Intelligence, Mobile Computing, Artificial Neural Network, MANET's Computer Networking

S.No.	Paper ID	Paper Title	Page No
14	19	**A Fuzzy Logic Approach To Increase Quality of Service in Software Defined Networking** *Amirhossein Moravcjosharieh, Kourosh Ahmad, Saghir Ahmad*	68

15	22	**An Outline on Big Data and Big Data Analytics** *Devottam Gaurav, Jay Kant Pratap Singh Yadav, Rohit Kumar Kaliyar, Ayush Goyal*	74
16	49	**Implementation of Biometric Security in a Smartphone based Domotics** *Swati, Ramjee Prasad Gupta*	80
17	51	**A Review on Different Ranking Algorithms** *Shadab Irfan, Subhajit Ghosh*	86
18	54	**Generating Patterns and Sub-Patterns of Pairwise Comparison Matrices for the Selection of Software Requirements** *Shadab Khan and Chaudhary Wali Mohammad, Mohd. Sadiq*	91
19	83	**Breast Cancer Diagnosis Using Deep Learning Algorithm** *Naresh Khuriwal, Nidhi Mishra*	98
20	101	**Selfish Node Detection using Game Theory in MANET** *Akansha Vij , Vishnu Sharma, Parma Nand*	104
21	118	**Deep Content-Collaborative Recommender System (DCCRS)** *Shipra Narang, Nikita Taneja*	110
22	120	**Use of Machine Learning in the Area of Image Analysis and Processing** *Youddha Beer Singh, Aditya Dev Mishra, Parma Nand*	117
23	134	**Analogous Examination of Various Machine Learning Algorithm Applied to Big Data** *Shallu Sehgal, Manisha Agarwal*	121
24	136	**A New Active Queue Management Algorithm : ALTDROP** *Sanjeev Patel, Akash Gupta, Manjeet Singh, Nikhil, Vishnu Sharma*	124
25	145	**Indian Judicial System Overview and a Approach for Automatic Roster Preparation and Case Scheduling for Faster Case Solving (Need of : E-Courts)** *Manjeet Singh*	128
26	180	**A Robust Approach for Lane Detection in Challenging Illumination Scenarios** *Kodeeswari Manoharan, Philemon Daniel*	132
27	240	**Trend Analysis in Machine Learning Research Using Text Mining** *Deepak Sharma, Bijendra Kumar, Satish Chand*	136
28	261	**Handwriting recognition using Deep Learning in Keras** *Shefali Arora, MPS Bhatia*	142
29	267	**Big Data and Its Applications— A Review** *Bhawana Gupta, Ashwini Kumar, Raghvendra Kumar Dwivedi*	146
30	268	**Big Data and Internet of Things : A SurveyBig Data and Internet of Things : A Survey** *Ajitesh Kumar Saha,Ashwini Kumar, Vishu Tyagi, Sanjoy Das*	150
31	282	**Machine Learning Based Approach To Sentiment Analysis** *Sandeep Nigam, Ajit Kumar Das, Rakesh Chandra Balabantaray*	157
32	283	**Single-Document Summarization Using Sentence Embeddings and K-Means Clustering** *Sanchit Agarwal, Nikhil Kumar Singh, Priyanka Meel*	162
33	289	**On Packet Throughput in Cognitive Radio under Primary Delay Constraint** *Deepika Bilyan, Ashok Kumar, SoniYadav*	166
34	296	**Determination of Parkinson's disease utilizing Machine Learning Methods** *Kaninika, Akash Tayal*	170

35	299	**Performance Evaluation of demand routing protocols of MANETS** *Faheem Habib, Kaushik Subudhi, Prashant Mishra, Prateek Sharma, Srichandan Sobhanayak, Laxmikanta Mohanty, Sandeep Nigam*	174
36	304	**A Survey of Deep Learning Techniques in Speech Recognition** *Akshi Kumar, Sukriti Verma and Himanshu Mangla*	179
37	343	**Analysis of Variants of KNN Algorithm based on PreprocessingTechniques** *Vibha, Amit Prakash Singh*	186
38	357	**Big Data in Applications of Automated Systems** *Prithvi Singh,Aditya Rana,Rupesh K Mishra*	192
39	393	**GPU Computing Revolution: CUDA*** *Ramandeep Singh Dehal, Chirag Munjal, Arquish All Ansari, Anup Singh Kushwaha*	197
40	466	**Critical Evaluation of Secure Routing Protocols for MANET** *Ganesh Kumar Wadhwani, Sunil K Khatri, S K Muttoo*	202
41	468	**A Statistical Approach to Adult Census Income Level Prediction** *Navoneel Chakrabarty, Sanket Biswas*	207
42	470	**Automatic Identification of Arunachal language Using K-Nearest Neighbor Algorithm** *Karter Nyodu, Koj Sambyo*	213
43	471	**A Survey on Selfish Node Detection in MANET** *Harshita Yadav and Hemanta Kumar Pati*	217
44	487	**An Improved AODV Protocol to Detect Malicious Node in Ad hoc Network** *Rajat Kishor Varshney, Anil Kumar Sagar*	222
45	489	**IoT based National Healthcare Framework for Vector-Borne diseases in India perspective : A Feasibility Study** *Rajeev Kapoor, Jagpreet Singh Sidhu, Subash Chander*	228
46	490	**A brief review on antlion optimization algorithm** *Sumit Kumar, Amit Kumar*	236
47	499	**Efficient Implementation of LWDD using Unfolding Technique** *Juhi Kumari, Tarun K. Rawat*	241
48	504	**Mobile Cloud Computing : Issues and Challenges** *Indu Sahu, U S Pandey*	247
49	507	**An Enhanced Recommendation System using proposed Efficient K Means User-based Clustering Algorithm** *Shaivya Kaushik*	251
50	516	**A Survey on Big Data Analytics** *Saba Ahmad, Paramdeep Singh, Anil Kumar Sagar*	256
51	517	**Security Provision In VANETs Using Group Based Key Share Algorithm** *Km Manisha Rai, Anuradha Yadav, Anil Kumar Sagar, Shrddha Sagar*	261
52	520	**An Efficient Topology Management Algorithm in MANETS** *Sandhya Katiyar, Sanjay Kumar*	267
53	529	**Comparative Analysisof PID Controller for Speed Control of DC motor with Intelligent Optimization Algorithms** *Jeetendra Agarwal, Girish Parmar, Rajeev Gupta*	273
54	532	**Cache Based Side Channel Attack: A Survey** *Sandeep Saxena, Goutam Sanyal, Manu*	278

55	540	**A Survey on MAC Layer Protocols for Machine to Machine Communication** *Devesh Tyagi, Rajneesh Agrawal and Hari Mohan Singh*	285
56	552	**Prioritisation of Decision Making Process on Political Parties by using AHP Model** *Shrddha Sagar, Avadhesh Kumar, Anil K.Sagar, Pallavi M.Goel*	N/A
57	554	**An Overview of Deep Learning Architectures, Libraries And its Applications Areas** *Mayank Dixit, Abhishek Tiwari, Himanshu Pathak, Rani Astya*	293
58	*555*	***Survey on Human Emotion Recognition: Speech Database, Features and Classification*** *Youddha Beer Singh, Shivani Goel*	*298*
59	567	**The risk-models and risk-criteria for information confrontation in social media** *Alexey Nazarov, Artem Sychev*	302

Track-3
Cyber Security, Virtual Reality, Network Security, WSN, Multimedia Applications

S.No.	Paper ID	Paper Title	Page No
60	7	**Performance Analysis of Stegano Data with Improved LSB Substitution using Horse Step Algorithm and Advanced Encryption Standard** *Rhishav Poudyal, Subarna Shakya*	307
61	44	**Identification of non collaborative nodes in ad-hoc network using credit based methods** *Chitvan Gupta, Rajdev Tiwari, Prashant Singh*	312
62	73	**Qualitative analysis of financial statements for fraud detection** *Aastha Bhardwaj, Rajan Gupta*	318
63	110	**The Cryptanalysis of a Secure Authentication Scheme Based on Elliptic Curve Cryptography for IOT and Cloud Servers** *Adesh Kumari, M. YahyaAbbasi, Vinod Kumar, MansafAlam*	321
64	160	**A Survey of Wireless Sensor Network and its types** *Manish Kumar Singh, Syed Intekhab Amin, Syed Akhtar Imam,Vibhav Kumar Sachan, Amit Choudhary*	326
65	230	**Ensuring Confidentiality in BSN with 1-D Chaos Based Image Encryption Scheme** *Harshvardhan Tiwari, Satish Kumar N, Harshitha R, Shilpa N, Rakshatha S, Archana K N*	331
66	245	**An Improved Image Steganography Technique using Block Division & Least Significant Bit Approach** *Aditi Gupta, Sachin Ahuja*	335
67	276	**E2EE For Data Security For Hybrid Cloud Services: A Novel Approach** *Kavita Saini, Vaibhav Agarwal, Arjun Varshney, Anushka Gupta*	340
68	303	**Performance Evaluation of AODV, DSDV and DSR Routing Protocol for Wireless Adhoc Network** *Anisha Sahoo, Ankita Shreya, Choudhury Smita Dash, IUshree Priyadarshini, Srichandan Sobhanayak, Soumyashree S. Panda, Sandeep Nigam, Prakhar Golchha*	348
69	308	**Performance Analysis of Reactive Routing Protocols in MANET under CB R Traffic using NS2** *Ritesh Kumar Mohapatra, Subhasarthak Samantaray, Asutosh Sahoo, Shubham Rath, Sandeep Nigam, Soumyashree S. Panda Prakhar Golcha, Srichandan Shobhanayak*	352
70	309	**Energy Optimization for Cooperative Multipath Routing in MANETs using Network Coding** *Saurabh Kumar, Debasrit Mohanty, Alisha Panda, Lipsa Das, Sandeep Nigam, Soumyashree S. Panda, Prakhar Golcha, Srichandan Shobhanayak*	357
71	316	**A Survey on Black Hole Attack in MANET Using AODV** *Prakhar Golchha, Hemanta Kumar Pati*	361

72	332	**Malware Detection in Android Operating System** *Zinal D. Patel*	366
73	351	**Cryptanalysis of a Short Certificate-Based Signature Scheme with Provable Security** *Pankaj Kumar, Vishnu Sharma*	371
74	352	**Cryptanalysis of a Certificateless Signature Scheme** *Pankaj Kumar, Vishnu Sharma*	374
75	481	**Cyberbullying: A Risk of CyberAddiction** *Geetika Sarna, MPS Bhatia*	377
76	521	**Architechture, Applications and Security for IOV : A Survey** *Lata Yadav, Sudhanshu Kumar, Anil Kumar Sagar, Subrata Sahana*	383

Track-4
Web Intelligence & Semantics

S.No.	Paper ID	Paper Title	Page No
77	80	**Development of Web Based AC Dimmer Using Lab View** *Neeraj Khera, Prateekshya Biswal, Chintalapudi Likhith*	391
78	92	**Fractality and Stationarity Analysis on Stock Market** *Abhra Chaudhuri, Bikash Sadhukhan, Somenath Mukherjee, Radha Tamal Goswami, Sajib Chowdhury*	395
79	121	**Performance Analysis of Automated Testing Tools : JMeter and Test Complete** *Rakesh Kumar, Sunakshi Mamgain, Srikant Kumar, Rabindra Kumar Barik*	399
80	124	**Comparative Analysis on Automated Testing of Web-based Application** *Rakesh Kumar Lenka, Utkalika Satapathy, Meenu Dey*	408
81	143	**Load Performance Testing on Cloud Platform** *Rakesh Kumar Lenka, Pranali Bhanse, Utkalika Satapathy*	414
82	273	**Comparison of Traditional Testing and Cloud Testing** *Pooja Arora, Anurag Dixit*	420
83	324	**Heuristic Load Balancing Algorithms in Vulnerable Cloud Computing Environment** *Nidhi Verma, Vidushi Sharma, Monika Kashyap, Apurva Jha*	424
84	359	**Block Cloud : Block Chain with Cloud Computing** *Nikita Sanghi, Rupali Bhatnagar, Gaganjot Kaur, Vinay Jain*	430
85	483	**An Improved Approach for Web Document Clustering** *Vaishali Madaan, Rakesh Kumar*	435
86	488	**An Analysis of Real-time Network Traffic for Identification of Browser and Application of user using Clustering Algorithm** *Anshu Priya, Sunit Nandi, R S Goswami*	441
87	524	**Secure and Efficient Framework for Task Execution in Cloud Environment** *Manu, Sandeep Saxena,Goutam Sanyal, Umang Kant*	446

Track-5
Ubiquitous Computing & Networking

S.No.	Paper ID	Paper Title	Page No
88	37	**Multi-Armed Bandit Learning Approach with Entropy Measures for Effective Heterogeneous Networks Handover Scheme** *Subash Chandra Pakhrin, Dibakar Raj Pant*	451
89	219	**Traffic Grooming of Different Architectures in Optical Networks** *Neeraj Mohan, Surbhi Gupta*	456
90	319	**Scale Free Fully Informed Particle Swarm Optimization : Parametric Perspective** *Vasudha Dwivedi, Ajay Sharma*	461
91	438	**Fair Allocation of Resources on Modulation and Coding Scheme in LTE Networks With Carrier Aggregation** *VuyoPana, Vipin Balyan ,Ben Groenewald*	467
92	449	**New improved Design for Low Leakage and High Performance SRAM cell in ULP Applications** *Tripti Tripathi, D.S. Chauhan, S.K. Singh*	471
93	455	**Sentiment Analysis of Demonetization for Indian Currency** *Vidhisha Chauhan, Deepak Kumar*	476
94	479	**Level Tree : A New Scalable Data Center Networks Topology** *Manjish Pal, Prashant Sahu, Shailesh Jaiswal*	482
95	510	**Security Issues with Virtualization in Cloud Computing** *Vimlesh Kumar, Rajkumar Singh Rathore*	487
96	515	**A flow Control based Multi-rate Congestion Control Mechanism in Heterogeneous Network Environment** *Tayyab Khan, Mahendra Kumar Jangir, Piyush Kumar Mudgal*	492

Track-6
Software Engineering & Information Systems

S.No.	Paper ID	Paper Title	Page No
97	25	**A Comprehensive Investigation of Quality of AOP-based Small-Scale Projects using Aspect-Oriented Software Quality (AOSQ) Model** *Pankaj Kumar, S. K. Singh, Sufia Nadeem Chishti*	497
98	32	**Missing Value Imputation using Hybrid K-Means and Association Rules** *Geeta Chhabra, Vasudha Vashisht, Jayanthi Ranjan*	501
99	67	**Book Recommendation using Query Expansion and information Retrieval Methods** *Ritesh Kumar, Rajendra Pamula*	510
100	89	**Prediction of Optimum Release Time of Software Ensuring High Achievable Reliability** *Renu Garg, Amit Gupta*	514
101	104	**Evaluating Faculty Performance Using Ensemble Techniques** *Suman Bhatnagar, Prashant Sahai Saxena*	519
102	144	**Automated Testing Tool : QTP** *Rakesh Kumar Lenka, Kabita Manjari Nayak, Sarthak Padhi*	526

103	183	**Reduced Gate Oxide Leakage Current in Junction Less FinFET** *Shalu Kaundal, Ashwani K. Rana*	533
104	201	**RFID and IR based Smart Shopping Mart Management System** *Ria Singh, Satyam Verma, Kriti*	536
105	404	**Software Development Approaches Significant for Runtime Software Evolution : A Review** *Jaya Sinha, Kiran K. Ravulakollu, Shri Kant*	541
106	405	**Critical Investigation of Denial of Service and Distributed Denial of Service Models and Tools** *Ankita Sharma, Anshu Bhasin*	546
107	459	**Remote Traffic Monitoring & Control System** *Jayati Saxena , Ranjeeta Yadav, S.K. Singh*	552
108	462	**Conditional Mutual Information based Attribute Weighting on General Bayesian Network Classifier** *Marya Sangeetha, Keshavmurthy B.N.*	558

Track-7
Intelligent Systems & Automation

S.No.	Paper ID	Paper Title	Page No
109	15	**Text Extraction from Bills and Invoices** *Harshit Sidhwa, Sudhanshu Kulshrestha, Sahil Malhotra, Shivani Virmani*	564
110	191	**Securing Virtual Infrstructure in Cloud Computing using Big Data Analytics** *Atul Kumar Gupta, Arjun Choudhary, Preeti Chauhan*	569
111	192	**Voice Recognition Application Based Home Automation System with People Counter** *Gudipati Sravanthi, Gottipati Madhuri, Nipun Sharma, Ashu Tiwari, Abhishek Kashyap, B. Suresh*	574
112	200	**Sheershak : an Automatic Title Generation Tool for Hindi Short Stories** *Leena Jain, Prateek Agrawal*	579
113	202	**Edge Analytics for Building Automation Systems : A Review** *Arushi Sharma, A. Sai Sabitha, Abhay Bansal*	585
114	214	**Forecasting Stock Price Using Conditional Inference Tree** *Shivam Thakur, Shekar Singh, Seema Sharma*	591
115	333	**Dynamic Tool for American Sign Language Finger Spelling Interpreter** *Prateek SG, Jagadeesh J, Siddarth R, Smitha Y, P. G. Sunitha Hiremath, Neha Tarannum Pendari*	596
116	371	**A Review on Video Summarization Approaches : Recent Advances and Directions** *Amit Bora, Shanu Sharma*	601
117	416	**An Overview of Anomaly Detection in Video Surveillance** *Phulpreet Kaur, M.Gangadharappa, Shalu Gautam*	607
118	432	**Video Segmentation: A Systematic Review on Recent Advances, Techniques and Classification** *Choppa Bhargav, Aravind Sai Ram, Shanu Sharma*	615
119	467	**Drowsiness Detection and Alert System** *Hemant Kumar Dua, Sanchit Goel, Vishal Sharma*	621

120	477	**Slew Rate Enhancement** *Akanksha Singh, Vandana Niranjan, Shikha Soni, Ashwini Kumar*	625
121	485	**Human Based Computation : A Solution to Computer Vision Problems** *Parminder Kaur, Rakesh Kumar*	630
122	508	**Automatic Classification of Non Hodgkin's Lymphoma using Histological Images : Recent Advances and Directions** *Pavani Battula, Shanu Sharma*	634

Track-8
Hardware Design & Communication

S.No.	Paper ID	Paper Title	Page No
123	13	**Design and Implementation of UDP Tunneling-based on Open SSH VPN** *Irfaan Coonjah, Piene Clarel Catherine, K. M. S. Soyjaudah*	640
124	33	**Application of GWO in Design of Fractional Order PID Controller for Control of DC Motor and Robustness Analysis** *Alisha Ahmed, Girish Parmar and Rajeev Gupta*	646
125	34	**Transconductance Boosting of OTA** *Nimeesha Rani, Vandana Niranjan*	652
126	36	**Accomplishing Approximately Zero Energy Buildings with Battery Storage Using FLANN Optimization** *Mohini Yadav, Majid Jamil, M. Rizwan*	656
127	47	**Performance Analysis of Tri-channel Active Electrode EEG Device Designed for Classification of Motor Imagery Brainwaves for Brain Computer Interface** *Saroj Bista, Nanda Bikram Adhikari*	662
128	48	**Design of Dual Master I2C Bus Controller And Interfacing it With DC Motor** *Deepika, Neetika Yadav*	668
129	63	**Implementation of Search Engine Optimization** *Mayank Kumar Mittal, Neha Kirar, Jasraj Meena*	674
130	129	**Time Series Forecasting using Exponential Smoothing to Predict the Major Atmospheric Pollutants** *Sandip Roy, Sankar Prasad Biswas, Subhajyoti Mahata, Rajesh Bose*	679
131	167	**Discrete Cosine Transform Interpolation Approach To Design an Fractional Order Hilbert Transformer** *Dhanpal Singh, Nitin Kumar, Hari Pratap, Himanshu Kushwah*	685
132	169	**Digital Fractional Order Differentiator Designing Approach Using DCT Interpolation Techniques** *Nitin Kumar, Dhanpal Singh, Prashant Kumar, Himanshu Kushwah*	689
133	178	**High Input Impendance Biquadratic Filter Using Three Translinear Current Conveyors and Ground Capacitors** *Vishal Gaurav, Akshay Mishra, Pradeep Kumar*	693
134	189	**Reduction in Ambient Noise Levels using Low Cost Scalable ANC Device** *Ritik Channa, Anubhaw Dwivedi, Sandeep Sharma*	697
135	196	**H-Infinity Controller Design for Lime Kiln Process** *Sandeep Kumar Sunori, Pradeep Kumar Juneja, Mayank Chaturvedi, Alisha Rai*	701
136	217	**An Architecture to Support Interoperability in IoT Devices** *T Pratik, Rakesh Kumar Lenka, Gopal Krishna Nayak, Ankur Kumar*	705

137	259	**Query Answering for Kisan Call Centerwith LDA/LSI** *Sandeep Kumar Mohapatra, Anamika Upadhyay*	711
138	265	**Design and Comparison of Multislot Microstrip Patch Antenna for WiMAX and WLAN Application** *Pooja Singh Gautam, Dhananjay Singh, Surya Deo Choudhary, Baibaswata Mohapatra*	717
139	288	**Design and Analysis of Distributed Arithmetic based FIR Filter** *Shamim Akhter, Satyendra Kumar, Divya Bareja*	721
140	292	**Design of a Low Power Dynamic Comparator in 180nm CMOS Technology** *Anupriya Mishra, Manoj Kumar*	727
141	294	**Design and Implementation of CMOS Full Adder Circuit with ECRL and Sleepy Keeper Technique** *Aaina Nandal, Manoj Kumar*	733
142	298	**Kalman Filter Based Motion Estimation for ADAS Applications** *Shreya Bhat, Sphoorti S. Kunthe, Vinuta Kadiwal , Nalini C. Iyer, Shruti Maralappanavar*	739
143	300	**Performance of Energy Detection Techniques using Fusion Rules in Cognitive Radio** *Soni Yadav, Ashok Kumar, Deepika Bilyan*	744
144	334	**Spheres of Influence For Effective Viral Marketing** *Sanjay G Kulkarni, Akash Bilg, Dattatreya Miskin, Ravi Oursang, P.G.Sunitha Hiremath, Neha Tarannum Pendari*	750
145	365	**Particle Swarm Optimization of Control System for Sugar Crystallizer** *Sandeep Kumar Sunori, Pradeep Kumar Juneja, Mayank Chaturvedi, Aayushi Bansal*	754
146	366	**System Identification of Cane Carrier Process of Sugar Mill** *Sandeep Kumar Sunori, Pradeep Kumar Juneja, Mayank Chaturvedi, Aayushi Bansal*	758
147	377	***A Comparative Analysis of Charge Camp Circuits for Improved Output Voltage Near Subthresh hold Region*** *Hitesh Thawani, Shruti Agarwal, Monica Gupta*	762
148	385	**Antenna Design Optimization With Desired Null Placement Using Particle Swarm Optimization Algorithm** *Anuj Mathur, Ajith T. A., Sanjeev Saxena*	768
149	387	**Severity Prediction of Bug Reports using Text Mining : A Systematic Review** *Arvinder Kaur, Shubhra Goyal Jindal*	774
150	390	**A 32-nm Sub-Threshold 9T SRAM Bitcell with Improved Read and Write performance** *Monica Gupta,Kirti Gupta, Neeta Pandey*	781
151	400	**A Reference Generating Voltage Wide Range Low Power Current Comparator** *Ashu Kawatra, Veepsa Bhatia*	788
152	437	**ANN Modeling for Predicting Time Series** *Sandeep Ktunar Stmori, Pradeep Kumar Juneja, Mayank Chaturvedi, Alisha Rai, Aayushi Bansal*	792
153	531	**LBDR : Location-Based Directional Routing in Vehicular Adhoc Networks using Directional Antenna** *Kamlesh Kumar Rana, Sachin Tripathi, Ram Shringar Raw*	795
154	535	**Low Transistor Count Storage Elements and their Performance Comparison** *Owais Ahmad Shah, Imran Ahmed Khan, Geeta Nijhawan, Isha Garg*	801
155	536	**Congestion Management in Deregulated Power Systems : A Review** *Baldeep Singh Nagi, Gagandeep Kaur*	806
156	551	**A Review of Performance Enhancement in Solar Desalination Systems with the Application of Nanofluids** *Ashok Kumar Singh, D.B. Singh, V.K.Dwivedi, Navneet Kumar, J.K.Yadav*	814

Track-9
Signal & Image Processing, VLSI Design

S.No.	Paper ID	Paper Title	Page No
157	12	**Adaptive Window-Size Based SDSA Image Steganography for High-Level Data Securits** *Ajeet Lowanshi. Anjana Pandey. Mahesh Pan*	820
158	130	**A New Image Steganography Technique Based on Pixel Intensity and Similarity in Secret Message** *Aruna Malik, Rajeev Kumar, Samayveer Singh*	828
159	138	**Fault Injection Techniques - A Brief Review** *Rakesh Kumar Lenka, Sarthak Padhi, Kabita Manjari Nayak*	832
160	155	**Automatic Number Plate Recognition** *Abhishek Kashyap, B.Suresh, Anukul Patil, Saksham Sharma, Ankit Jaiswal*	838
161	162	**A Novel GA-NN Approach for Feature Optimization And Classification** *Pankaj Mehta, Mayank Sah, Narendra Mishra*	844
162	164	**A Visibility Restoration Framework for Rainy Images by Using Lo Gradient Minimization and Bilateral Filtering** *Narendra Singh Pal, Shyam Lal, Kshitij Shinghal*	848
163	179	**Universal Filter Design Using Second Generation Current Conveyor (CCII)** *Akshay Mishra, Vishal Gaurav, Pradeep Kumar*	N/A
164	224	**Hyperspectral Image Segmentation using Multi-dimensional Histogram over Principal Component Images** *Aloke Datta, Anisha Chakravorty*	857
165	232	**An Ultra Wideband MIMO Antenna with Improved Isolation** *Gouri Das Adhikary, Ajeet Singh Maurya, Shrivishal Tripathi*	863
166	235	**Gender Identification based on Voice Signal Characteristics** *Shivam Chaudhary, Devendra Kumar Sharma*	869
167	275	**An Efficient Biometric based three-factor authentication scheme for Wireless Sensor Network** *Deepti Singh, Bijendra Kumar, Samayveer Singh, Satish Chand*	875
168	305	**Noise in Functional Magnetic Resonance Imaging** *Kritika Anand, Akash Tayal*	880
169	313	**Pervasive Online Spam Review Detection based on Ontology using Naive Bayesian** *Alok Katiyar, Rishi Kumar, Shri Kant, Y.D.S Arya*	883
170	330	**Comparison of LSB and Proposed Modified DWT Algorithm for Image Steganography** *Akanksha Singh, Monika Chauhan, Shilpi Shukla*	889
171	331	**Design and Analysis of Multi Band antenna for S and C Band** *Nikita Saxena, Asmita Rajawat*	894
172	382	**GLCM and PCA based Image Steganography using Chaos-based Encryption** *Norkit Lepcha, Barjinder Singh Saini, Indu Saini*	899
173	399	**Analogy of Ring Resonators : Single and Double** *Neha Singh, Krishna Chandra Roy*	905

174	401	**Video Annotation Tools : A Review** *Eshan Gaur, Vikas Saxena, Sandeep K Singh*	911
175	412	**Extracting Text Regions from Scene Images using Weighted Median Filter and MSER** *Rituraj Soni, Bijendra Kumar, Satish Chand*	915
176	415	**An Overview of Human Activity Recognition from Recordings** *Shalu Gautam, Phulpreet Kaur, M.Gangadharappa*	921
177	417	**Framework for Automatic Diagnosis of Psychological Disorders** *Girish P Mallya, Amaresh Hiremani, Ganesh Gajakosh, Darshan Badiger, P.G. Sunitha Hiremath*	929
178	420	**A Prototype for Realtime Monitoring of Fetal Health Using a Pressure Sensitive Material and Sensor Based Belt** *Palak Gupta, Aishwarya Saxena, Tushar Garg, Aanchal Khatri, Ranjeeta Mittal*	935
179	422	**ECG Signal Spectral Estimation and Noise Filtering** *Abhijit Singh Bhakuni, Kamakshi Rautela, Pradeep Juneja*	941
180	425	**Facial Detection and Recognition using Open CV on Raspberry Pi Zero** *Gagandeep Singh Nagpal, Gagandeep Singh, Jappreet Singh, Nishant Yadav*	945
181	465	**Optimal Design of Wide Band IIR Differentiators Using WMSE Approach** *Charu, D. K. Upadhyay*	951
182	469	**Identification of Suspicious Patterns in Social Network using Zipf's Law** *Geetika Sarna , MPS Bhatia*	957
183	472	**GWTM and Crow Search Algorithm for Face Recognition in Low-Resolution Images** *Renjith Thomas, M.J.S. Rangachar*	963
184	484	**A Hybrid approach for ECG Signal Analysis** *Suman Lata, Rakesh Kumar*	971
185	493	**Fake News in Digital Media** *Bhawna Narwal*	977
186	497	**Comparative study of Image Steganography Techniques** *Himanshu Arora,Cheshta Bansal, Sunny Dagar*	982
187	527	**Gesture Recognition Using Gabor-Mean LBP-PCA Feature Extraction** *Archana Kumari Sharma, ShubhLakshmi Agrwal, Sandeep K. Gupta, Umesh Kumar*	986
188	534	**Design of Eye Writer for ALS Patients through Eyecan** *Rishabh Kaushik, Tushar Arora, Sukanya, Rohit Tripathi*	991
189	539	**PHSCR : Particle Swarm Optimization Based Handoff Spectrum Using Cognitive Radio** *Rajneesh Agrawal, Devesh Tyagi , Hari Mohan Singh*	996
190	543	**Optimized Text Data Processing** *Saransh Gupta*	1000
191	544	**Metamaterial Based Compact Quad Band Microstrip Antenna for Wireless Applications** *Alok Chandra Joshi, R. P. S. Gangwar, Ashwini Kumar Arya*	1005
192	545	**Image Processing Based Automatic Identification of Freshness in Fish Gill Tissues** *Monika Arora, Parthasarathi Mangipudi, M.K.Dutta, Radim Burget*	1011
193	546	**Metamaterial Based Compact Super Wide Band Microstrip Antenna with DGS for Wireless Applications** *Neha Sharma, R.P.S. Gangwar, Ashwini Kumar Arya*	1016

194	564	**Brain Tumor Classification using Hybrid Model of PSO and SVM Classifier** *Arun Kumar. Alakhnanda Ashok, MA Ansari*	1022

Track-10

Wireless Sensor Networks, Security Robotics & Automation, Communication Network and Systems, Smart Grid Technologies, Smart buildings Technologies, New Measurement technologies and application, Fuzzy & Neural Networks, Digital Rights Management System

S.No.	Paper ID	Paper Title	Page No
195	109	**A Neural Network Model For Time Series Forecasting of U.P. East Rainfall** *Manpreet Kaur Aiden, K.C. Tripathi*	1027
196	135	**Behavior Driven Development: Tools and Challenges** *Rakesh Kumar Lenka, Srikant Kumar, Sunakshi Mamgain*	1032
197	158	**Nepali SMS filtering Using Decision Trees, Neural Network and Support Vector Machine** *Tej Bahadur Shahi, Subarna Shakya*	1038
198	159	**Changing Energy Paradigm and its role in Economic Growth in Global South** *Pooja Sharma , Pooja Sharma*	1043
199	170	**X-Cardio : Fuzzy Inference System to Diagnose Heart Diseases** *Vishu Madaan, Anjali Goyal*	1049
200	198	**Analysis of Information Security Situation Using Sugeno Fuzzy System** *Anshi Srivastava, Ashish Srivastava, Pallavi Shrivastava*	1054
201	199	**Piezo-Power Charging System** *Kriti, Ranjana Kumari, Prateek Gupta, Sushmita Dey*	1060
202	220	**Design and Development of U-shaped Slot Wearable Antenna for WLAN/Wi-Fi and WBAN Applications** *Raghvenda Kumar Singh, Ashish Gupta*	1063
203	223	**A Compact Planner MIMO Antenna for GSM, DCS, PCS, UMTS, LTE, WLAN and 5G Application** *Harsh Verdhan Singh, ShrivishalTripathi, Ramesh Vaddi*	1068
204	228	**Performance Analysis of Wireless Sensor Networks over k - m Shadowed Fading Channel** *Ashish Goswami, Ashok Kumar*	1074
205	237	**Meta-Heuristic Based Optimized Deep Neural Network for Streaming Data Prediction** *Puneet Kumar, Shalini Batra*	1079
206	241	**A comparative study on Fuzzy Logic and Intuitionistic Fuzzy Logic** *Shahla Tarannum, Suraiya Jabin*	1086
207	247	**Character Recognition and Speech Synthesis using Adaptive Neuro Fuzzy Inference System** *Shimona Gupta, Sakshi Gupta*	1091
208	274	**Comparative Study of Various Training Algorithms of Artificial Neural Network** *Pragati Jaiswal, Nikhil Kumar Gupta, A. Ambikapathy*	1097
209	297	**Analysing Performance Gains Through Control of Global Resources for Heterogeneous Wireless Network** *Anubhav Bhattacharya, Chava Vineeth, Pinnimty Venkata Naga, Sai Rama Krishna, Sarthak Jain, Srichandan Sobhanayak, Sandeep Nigam, Soumyashree S.Panda, Prakhar Golcha*	1102
210	315	**Garbage Localization based on Weakly Supervised Learning in Deep Convolutional Neural Network** *Mohd Anjum, M. Sarosh Umar*	1108

211	363	**Smart Cities : Progress and Problems in India** *Priyanka Gupta, Rajan Gupta*	1114
212	368	**Emerging Trends in Localization Techniques for WSNS : A Review** *Ravi Sharma, Shiva Prakash*	1119
213	378	**An Improved Convolutional Neural Network for Classification of Small Patches of Granite Tiles** *Neha Singh, Barjinder Singh Saini*	1125
214	384	**Efficient Approach for Heuristic Algorithm** *Sumreti Gupta*	1131
215	389	**Pedestrian and Vehicle Detection Using Night-Vision Camera through CNN on Indian Roads** *Mayank Raj, Swet Chandan*	1136
216	414	**Cease Fire : The Fire Fighting Robot** *Shiva Mittal, Manish Kumar Rana, Bhardwaj, Meenakshi Mataray, Shubham Mittal*	1143
217	429	**Quality of Service (QoS) of Wireless Networks Authentication Based on 802.1X Standard** *Deepak choudhary, Sanjay Kumar Singh, Jaishanker Keshari, Imran Ahmed khan*	1147
218	474	**Classification of Computer Generated Images from Photographic Images using Convolutional Neural Networks** *Chaitanya Chawla, Divya Panwar, Gurneesh Singh Anand, M.P.S Bhatia*	1153
219	492	**An Adaptive Neural Fuzzy Inference System for Prediction of Student Performance in Higher Education** *Sandhya Maitra, Sushila Madan, Prerna Mahajan*	1158
220	495	**A Novel Approach of Requirements Prioritization Using Logarithmic Fuzzy Trapezoidal AHP for Enhancing Academic Library Service** *Yash Veer Singh, Bijendra Kumar, Satish Chand*	1164
221	526	**Foreign Rate Exchange Prediction Using Neural Network and Sentiment Analysis** *Swagat Ranjit, Shruti Shrestha, Sital Subedi, Subarna Shakya*	1173
222	530	**Brain Tumor Segmentation and Classification Using MRI Images via Fully Convolution Neural Networks** *Sanjay Kumar, Ashish Negi , J.N Singh, Amit Gaurav*	1178
223	537	**Network Traffic Classification Analysis Using Machine Learning Algorithms** *Sanjeev Patel, Akash Gupta, Nikhil, Suman Kumari, Manjeet Singh, Vishnu Sharma*	1182
224	547	**A Particle Swarm Optimization Strategy using QSAR Modeling on the Second Generation Neural Network** *Humera Parveen, Vikash Yadav, Amit Gupta, Yogesh Sharma*	1188
225	553	**Comparative Analysis of Different Types of Micro-grid Architectures and Controls** *Arvind Sharma, Mohan Kolhe, Ulltveit-Moe Nils, Kapil Muddineni, Ashwini Mudgal, Shirish Garu*	1200