## 2017 International Conference on Information, Communication, Instrumentation and Control (ICICIC 2017)

Indore, India 17-19 August 2017



**IEEE Catalog Number:** 

CFP17L13-POD 978-1-5090-6314-7

ISBN:

## Copyright $\odot$ 2017 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:
 CFP17L13-POD

 ISBN (Print-On-Demand):
 978-1-5090-6314-7

 ISBN (Online):
 978-1-5090-6313-0

## **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@proceedir

E-mail: curran@proceedings.com Web: www.proceedings.com



## **CONTENTS**

S No	Paper Id	Paper Title / Page
1	3	Enhanced Bandwidth Circularly Polarized Antenna array based on Sequentially Rotated Feed Technique for C-Band 1
2	5	Efficient Time Shared Task Scheduler for Cloud Computing 5
3	6	Virtual Machine Schedulers for Cloud Computing 9
4	12	Bandwidth optimization of an Ultra-Wide Band Microstrip Antenna 13
5	19	The Performance Study of NLMS Algorithm for Acoustic Echo Cancellation 17
6	25	FLC based MPPT Controller for Optimal Tracking Photovoltaic system 22
7	26	Design & Optimization of Switched Capacitor Array Based Differential CMOS LC VCO for Wide Band Application 28
8	30	Detection of Fault in Transmission Line during Power Swing Using Fuzzy C-Means Clustering 33
9	34A	Issues of concern in Storage system of IoT Based Big Data 37
10	39	A Novel Approach for Multiple DG Allocation in Distribution System of Jaipur City 43
11	41	Evaluation of state probabilities based on deterministic criterion for a distribution system with distributed generation employing boot strapping technique 49
12	42	Diminution of Harmonics in Multilevel Inverter Using Particle Swarm Optimization 55
13	43	Design of single and dual band pass filter using Substrate Integrated waveguide with DGS 63
14	46	R – Peak detection using Bayesian Regularization Neural Network 68
15	47	Multiobjective optimization of 2DOF controller using NSGA-II for shell and tube heat exchanger 71
16	49	A New Sorting Approach for Big Data Set: Hit Sort 79
17	53	A Multilevel System to Mitigate DDoS, Brute force and SQL Injection Attacks for Cloud Security 84
18	57	Implementation of an Efficient MPPT Method for a PV System Using SEPIC Converter 91
19	60	Vibration Sensor: Piezoelectric Power Generator 96

20	62	Throughput-Save Ratio Optimization in Wireless Powered Communication Systems 100			
21	65	Comparative Study of Interconnect Network On Chip Topology In Multicore Processors 106			
22	67	An approach to analyze the impact of DDOS attack on mobile cloud computing 112			
23	74	The Impact of Time-Bandwidth Product on Cooperative Spectrum Sensing over AWGN and Fading Channels 118			
24	75	Minimum Area Layout of High Bandwidth Folded Cascode Operational Amplifier Using SCL 180nm CMOS Technology 125			
25	78	Speed Control of Electric Vehicle Using Fuzzy Logic Controller 131			
26	81	Security Issues in Fog Computing using Vehicular Cloud 136			
27	82	Improvement of Energy Efficiency Using PDORP Protocol in WSN 140			
28	84	Flexible attribute enriched role based access control model 146			
29	88	A modified approach of video watermarking using DWT-BP based LSB algorithm 152			
30	92	Noise Removal for Unconstrained Iris Recognition 158			
31	94	High Selectivity and Ultra-Wide Stopband Microstrip Lowpass Filter Using High-Low Impedance Resonators 163			
32	96	Comparative Study of different types of Relay Selection Scheme for Cooperative Wireless Communication 168			
33	98	Optimal Reactive Power Dispatch for Enhancement of Static Voltage Stability using Jaya Algorithm 172			
34	99	Enhancement of Voltage Security by MW-Generation Rescheduling based on Sensitivities using Black Hole 177			
35	100	Sound based Human Emotion Recognition using MFCC & Multiple SVM 182			
36	101	Evaluation of MTCMOS Technique with Park mode On chain of 2 Input CMOS NAND Gate 186			
37	103	Dynamic Phasor Model of WAMS enabled Transient Stability Controller 192			
38	107	A Novel Proposed Deer algorithm 198			
39	108	Split data green multihop cooperative communication 204			
40	112	Optimum values of TMS and PS of Overcurrent Relays using Amalgam of GA-NLP Methods 210			

41	113	Automated Medical Image Segmentation using RBF ANN 216
42	120	Routing Protocol in Hybrid Wireless Network which increases Quality of Service 221
43	121	Low Power, Area Efficient Dynamic Comparator with Reduced Activity Factor 225
44	122	Nonlinear PI with state feedback control for Activated Sludge Process 230
45	126	A Compact Printed Monopole Antenna with Symmetrical I and Rectangular Shaped Slots for WLAN/WiMAX Applications 237
46	130	DRLMS,DFELMS,LMS Adaptive Beamforming Algorithms for Smart Antenna System 242
47	131	Content delivery and management system 247
48	136	Enhancing E-governance using Data mining Tools and Techniques 252
49	138	Control System Design for Process With Recycle 257
50	140	Simulation of simplified SVM technique for three phase five-level cascaded H-bridge inverter 264
51	143	Designing Simulators For Various VLSI Designs Using The Proposed Artificial Neural Network Model TRIVENI 270
52	153	A Hybrid Approach Based on Encryption on Secure Intelligent Traffic System over VANET using DSRC 276
53	155	Cluster statistics based normalization for online fault diagnosis of self-powered neutron detectors 281
54	163	Area-EfficientHigh-Speed Hybrid 1-bit Full Adder Circuit Using Modified XNOR Gate 287
55	164	Design of Circularly Polarized Microstrip Patch Antennas for Wireless Communication 292
56	166	Leader Based Adaptive Fault Diagnosis Algorithm for Distributed Systems 296
57	167	Feasibility study and Performance evaluation of a grid-connected Rooftop Solar PV system 302
58	170	Design of Microstrip Patch Antennas Using Method of Moment Based MATLAB Codes 309
59	171	Load frequency control of interconnected five-area power system with PID controller 313
60	172	Low power CMOS NAND gate using DVS and Mutithreshold CMOS technique 321
61	175	Analysis of SPWM VSI fed AC Drive using Different Modulation Index 325
62	176	A Study to Increase 24 hour Efficiency of Distributed Generation: Review 331

63	178	High-speed, area efficient VLSI architecture of Wallace-Tree multiplier for DSP-applications 335			
64	182	Integrated Dead-Time SVPWM algorithm for Indirect Vector Controlled Two-level Inverter fed Induction Motor Drive 340			
65	185	Metamaterial Enhanced Magnetization Induced Communication for Wireless Applications 346			
66	186	Comparative Study of UPFC Installing at Various Location in Multimachine 351			
67	197	Power Quality Monitoring of Different Brands of Laptops 355			
68	198	Asymmetrical Parallel Slotted Multiband Microstrip Patch Antenna 359			
69	206	Maximum Electricity Generation from Low Cost Sediment Microbial Fuel Cell using Copper and Zinc Electrodes 363			
70	209	Interfacing of Hybrid Power System to Grid Using STATCOM & Power Quality Improvement 367			
71	210	Kluster: Application of k-means clustering to multi- dimensional geo-spatial data 372			
72	214	Performance of Cooperative Massive MIMO 5G Cellular System 379			
73	215	Study of DFIG Connected To Back-to-back Converter for Space Vector Control Techniques 384			
74	218	Frequency Spectrum-Based Optimal Design of Power System Stabilizer for Primary Frequency Control 389			
75	235	Evaluation of arduino based DAS for condition monitoring of induction motor 395			
76	236	Experimental Demonstration of Anti-windup Controller for Non-Linear Magnetic Levitation System 399			
77	239	Design of a CMOS Signal Processing System 404			
78	243	TrustRBAC: Trust Role Based Access Control Model in Multi-Domain Cloud Environments 409			
79	244	Comparison between SPWM and OHSW technique for harmonic elimination in 15 level multilevel inverter 416			
80	245	Short-Term Wind Speed Forecasting of Knock Airport Based on ANN Algorithms 421			
81	246	Solar PV Array Buck-Boost Converter Fed Single Phase Induction Motor Drives for Water Pumping 429			
82	247	A Design of Compact ultra-wide Band Antenna with Dual Band Notched Characteristics 434			
83	248	Solar assisted advance smart home automation 439			
84	252	Ordering Policy based Routing and Bandwidth Assignment Algorithms in Optical Networks 445			

85	253	Design of Photonic Crystal Fiber with Negative Chromatic Dispersion and Low Confinement Loss 450					
86	255	Local Neighborhood Analysis For Fabric Defect Detection 453					
87	256	A DC-DC Boost Converter with Soft Start Function and DPEA Technique 458					
88	257	A low power, low phase noise VCO using cascoded active inductor 464					
89	262	Low Power High Speed 1-bit Full Adder Circuit Design in DSM Technology 469					
90	265	Square Shape Slotted Multiband Microstrip Patch Antenna Using Defect Ground Structure 475					
91	272	A new leakage-tolerant domino circuit for wide fan-in gates with CNTFET 479					
92	273	Low Phase Noise VCO Using Injection Locking 487					
93	275	Ultra-Capacitor based Three level Bi-Directional isolated DC-DC converter for the Regenerative Breaking Energy Recovery System 491					
94	277	Reduced order model using Modified Cauer form for Multi-input and Multi-output LTI systems 497					
95	279	A Robust PID Controller for Load Frequency Control of Single Area Re-heat Thermal Power Plant using Elephant Herding Optimization Techniques 503					
96	280	An Cloud data Access control and Lock box approach for data sharing 509					
97	281	Optimal Design of PID Controller For An AVR System Using Monarch Butterfly Optimization 513					
98	285	An Ultra large Polarisation independent Bandstop Frequency Selective Surface for the Security of WiMax and WLAN Application 519					
99	286	Demand Side Management for Household Equipments 524					
100	290	Social Media Data Sensitivity and Privacy Scanning an Experimental Analysis With Hadoop 529					
101	291	Adaptive wiener filter for speech enhancement 535					
102	294	Nano-cavity Coupled Waveguide Photonic Crystal Based Biosensor Detection of Cervical Cancer Using Nucleus and Cytoplasm 539					
103	296	CSRR and C-Slot Loaded Triple Band Notched Ultra Wideband Antenna 544					
104	300	A Nano power Voltage Reference Generator Using of Sub threshold MOSFETs 548					
105	301	An Intelligent eNodeB for LTE Uplink based on Neural Network 553					
106	302	Dynamic Spectrum allocation for Hybrid Access Cognitive Femtocell Network 559					

107	304	Comparative Analysis of 2T, 3T and 4T DRAM CMOS Cells 565		
108	307	Noise Removal in Speech signal using Fractional Fourier Transform 571		
109	309	Robust Decentralized Fast Output Sampling Technique via reduced order models based Power System Stabilizer for Multimachine Power System 575		
110	319	Design of CMOS difference amplifier circuit for sigma delta ADC for aerospace applications 586		
111	325	Metal Metalloid Thin Film For The Application of Field Effect Transistor 590		
112	340	Brain Tumor Segmentation from MRI Using Fractional Watershed Transform 594		
113	342	Speed Control of DC Servo Motor Using Genetic Algorithm 600		
114	347	Facial Expression Recognition using Gabor filter and Multi-layer Artificial Neural Network 607		
115	348	Development of Algorithm for Soil Moisture Retrieval using PALSAR Data for Bare Soil 612		
116	349	Efficient Taxi Dispatching System in Distributed Environment 618		
117	350	Genetic Algorithm Based Cascaded H-Bridge Multilevel Inverters for PV System with MPPT Technique 624		
118	351	Diagnosis and Counting of Tuberculosis Bacilli Using Digital Image Processing 630		
119	356	Analysis of 2T1D memory cell with various active capacitors 635		
120	358	Study of 6MW Wind Farm with and without STATCOM using MATLAB/SIMULINK 641		
121	359	Temperature based performance analysis of doping-less Tunnel Field Effect Transistor 648		
122	360	Controlling Ambipolar Behavior and Improving Radio Frequency Performance of Hetero Junction Double Gate TFET by Dual Work-Function, Hetero Gate Dielectric, Gate Underlap: Assessment and Optimization 654		
123	364	Cloud Based 3D Printer 661		
124	368	Reflectance and Transmittance of Silicon Nanocone based Solar Cells at Varying Incidence Angles 665		
125	372A	Bluetooth controlled spy robot 668		
126	375	Scattered Context Grammar in Hindi Linguistics 672		
127	377	Designing of 2x1 Antenna with Improved Isolation Using Meander Line Structure 678		
128	379	Segmentation and Extraction of text from Curved Text Lines using Image Processing Approach 684		

129	384	A High-Speed Single-path Delay Feedback Pipeline FFT Processor using Vedic-Multiplier 689
130	385	Optimal design of Fuzzy Logic Controller based Automatic Voltage Regulator 695
131	386	Design and performance analysis of siloxanne based single mode optical fiber for designated wavelength windows 701
132	387	Smart health monitoring system 707
133	392	Performance Analysis of Combination of CS with PCA and LDA for Face Recognition 713
134	393	20nA Sub-threshold biased CMOS Reference Current Source 719
135	394	A Result Analysis of Pilot Assisted Channel Estimation in MIMO-STBC Systems over Time- Varying Fading Channels 723
136	396	Uncertain cloud resource provisioning using the predictive approach 727
137	397	Comparitive Analysis of Switching Techniques for Three phase Induction Motor Drive 734
138	399	Result Evaluation of Strongly Typed Field Verification based SQL Injection and XSS Attack Detection 741
139	400	A Result Evaluation on Anonymiser and Active Object Based TTP Location Privacy Framework 747
140	401	Addressing Class Imbalance Problem in Medical Diagnosis: A Genetic Algorithm Approach 753
141	405	A modified PID control with adaptive fuzzy controller applied to DC motor 761
142	409	Analysis and implementation of Shunt Active Power Filter Based on synchronizing Enhanced PLL 767
143	410	An Intelligent Text Editor for Hindi based on Micro-Parsing 772
144	411	RFID Based Lab Inventory Management System 776
145	413	Performance Analysis of Shunt Active Power Filter based on GSA tuned PI Controller 779
146	416	Economic Comparison of Solar PV and Diesel Water Pumping System 784
147	421	IOT application for the Design of Digital Drug Administration Interface 790
148	423	Cooperation of Multi-robots for obstacle avoidance in clutter environment using Differential Evolutionary Algorithm 795
149	425	Designing and Performance Analysis of Controller for PMSG based Wind Energy Conversion System 801
150	427	Comparative Analysis of Hybrid Electric Vehicle fed Through DC-DC Converter and Operated with Battery and Ultracapacitor 807

151	428	Optimization of LFC Controller of Two Area System Integrated with Wind Energy Using HSA 813
152	434	Performance analysis of LEACH based approaches for large area coverage in wireless sensor network 819
153	437	The Design of Intelligent Washing Machine Controller Based on FIS & ANFIS 824
154	441	An Alleviated Model for Private Cloud Deployment Using VMware 830
155	461	Despeckling of SAR Images using Discrete Shearlet Transform 833
156	462	Adaptive Pitch Control Design for Variable Speed Wind Turbine Using Chebyshev Neural Network 839
157	465	Design of a New Linear Robust Controller Structure 845
158	468	An approach to increase the awareness of e-governance initiatives based on Cloud computing 850
159	469	Rohrs Benchmark Problem Revisited by Adaptive Control with Closed Loop Reference Model 854
160	471	Proportional Learning Rate Model Reference Adaptive Control for Fast Adaptation 858
161	473	Reduced Order Modelling of LTI Systems using Invasive Weed Optimization 863
162	474	Performance Evaluation of Moth-Flame Optimization Algorihm considering different Spiral Paths for Optical Network Unit Placement in Fiber-Wireless Access Networks 867
163	475	Implementation of INC-PI MPPT and Its Comparison with INC MPPT by Direct Duty Cycle Control for Solar Photovoltaics Employing Zeta Converter 873
164	479	Detection & Prevention of Vampire Attack in Wireless Sensor Networks 879
165	480	Viability of grid-connected Solar PV System For a Village of Rajasthan 884