

# **2017 Third International Conference on Science Technology Engineering & Management (ICONSTEM 2017)**

**Chennai, India  
23-24 March 2017**



**IEEE Catalog Number: CFP17F10-POD  
ISBN: 978-1-5090-4856-4**

**Copyright © 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:	CFP17F10-POD
ISBN (Print-On-Demand):	978-1-5090-4856-4
ISBN (Online):	978-1-5090-4855-7

**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](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

# TABLE OF CONTENTS

<b>FEATURE BASED OPINION SUMMARIZATION OF ONLINE PRODUCT REVIEWS</b> .....	1
<i>Nilanshi Chauhan ; Pardeep Singh</i>	
<b>IOT: THE KERNEL OF SMART CITIES</b> .....	8
<i>Luv Kumar Aidasani ; Hrushabh Bhadkamkar ; Ashirr K. Kashyap</i>	
<b>A NOVEL METHOD FOR SCHEDULING WORKFLOWS IN CLOUD COMPUTING ENVIRONMENT</b> .....	12
<i>G. Narendrababu Reddy ; S. Phanikumar</i>	
<b>REFLECTION BASED PHENOLOGY MEHOD FOR SATELLITE IMAGE ENVIRONMENTAL CLASSIFICATION</b> .....	17
<i>K. R. Sivabalan ; E. Ramaraj</i>	
<b>MEDKNOWEX — A WEBSITE FOR EXTRACTING MEDICAL KNOWLEDGE USING AN OPINION TARGET FINDING SYSTEM</b> .....	23
<i>O. Pandithurai ; M. Meena ; V. Nivedha ; B. Preethi</i>	
<b>SISFAT: SMART IRRIGATION SYSTEM WITH FLOOD AVOIDANCE TECHNIQUE</b> .....	28
<i>S. Vidya Sagar ; G. Ragav Kumar ; Lino X. T. Xavier ; S. Sivakumar ; Ramesh Babu Durai</i>	
<b>SMART HOME DEVELOPMENT USING RELAY CIRCUIT FOR RURAL ENVIRONMENT</b> .....	34
<i>B. Ashokkumar ; M. Aswin Sriram ; J. Jones Michael ; R. Ramakrishnan ; S. Siva Subramanian</i>	
<b>D2CMUS: DETRITUS TO CINDER CONVERSION AND MANAGING THROUGH ULTRASONIC SENSOR</b> .....	38
<i>K. Kamatchi ; R. Sangeetha ; V. Subha ; S. Sivakumar ; R. Ramachandran</i>	
<b>MULTISERVICE PRODUCT COMPARISON SYSTEM WITH IMPROVED RELIABILITY IN BIG DATA BROADCASTING</b> .....	48
<i>K. B. Apoorva Sindoori ; L. Karthikeyan ; S. Sivakumar ; G. Abirami ; Ramesh Babu Durai</i>	
<b>SMART DEVICE FOR VISUALLY IMPAIRED PEOPLE</b> .....	54
<i>R. Kasthuri ; B. Nivetha ; S. Shabana ; M. Veluchamy ; S. Sivakumar</i>	
<b>SECURING INTER DOMAIN ROUTING DECISIONS USING VPREF ALGORITHM</b> .....	60
<i>K. S. Chandini ; S. Suchitra ; P. Sathish Saravanan ; S. Siva Kumar ; J. Seetha</i>	
<b>VARIOUS LOSSLESS COMPRESSION TECHNIQUES SURVEYED</b> .....	65
<i>C. Jayakumar ; S. Jancy</i>	
<b>SURVEY ON EFFICIENT AND SECURE STORAGE OF DIABETES PATIENT RECORDS IN CLOUD</b> .....	76
<i>V. Dhanalakshmi ; V. L. Jyothi</i>	
<b>USER HISTORY BASED INSULIN SUGGESTION SYSTEM USING MOBILE APPLICATION</b> .....	82
<i>V. L. Jyothi ; S. Ashok Senthil Kumar</i>	
<b>A NOVEL APPROACH TO AGGREGATION OF WEB DOCUMENTS BY SEMANTIC SUFFIX TREE AND SELF ORGANIZING FEATURE MAP METHODS</b> .....	87
<i>R. Thilagavathy ; R. Sabitha</i>	
<b>FRAGILE DATA STORING IN PUBLIC CLOUD FOR HOSPITAL ADMINISTRATION</b> .....	93
<i>S. Selvaprabhu ; J. Visunathi</i>	
<b>CHANGE POINT MONITORING FOR VEHICLE INCIDENT DETECTION AT INTERSECTION</b> .....	100
<i>Sameer Suregaonkar ; S. Denis Ashok ; Vinod Karar ; Shashi Poddar</i>	
<b>UNSUPERVISED MACHINE LEARNING FOR CLUSTERING THE INFECTED LEAVES BASED ON THE LEAF-COLOURS</b> .....	106
<i>P. Tamilselvi ; K. Ashok Kumar</i>	
<b>AN EFFICIENT APPROACH FOR OBJECT DETECTION AND TRACKING</b> .....	111
<i>B. Maga ; K. Jayasakthi Velmurgan</i>	
<b>A SURVEY FOR TRACKING AND MONITORING THE ALZHEIMER PATIENT</b> .....	116
<i>S. Saranya ; P. Jesujayarin</i>	
<b>AN EFFICIENT APPROACH FOR AUTOMATIC LICENSE PLATE RECOGNITION SYSTEM</b> .....	121
<i>B. Pechiammal ; J. Arokia Renjith</i>	
<b>RAT TRAP: INVITING, DETECTION &amp; IDENTIFICATION OF ATTACKER USING HONEY WORDS IN PURCHASE PORTAL</b> .....	130
<i>A. Karthik ; Murari Devakannan Kamalesh</i>	
<b>SURVEY ON TRAFFIC CLEARANCE FOR EMERGENCY VEHICLE</b> .....	133
<i>N. Shalini ; A. Subash Chandar</i>	

<b>SURVEY ON MULTIMODEL BIOMETRICS ON HUMAN IDENTIFICATION USING REAL TIME FILTERING ALGORITHM.....</b>	<b>142</b>
<i>S. Anusuya ; P. Jesu Jayarin</i>	
<b>FEATURE LEVEL FUSION APPROACH FOR PERSONAL AUTHENTICATION IN MULTIMODAL BIOMETRICS.....</b>	<b>148</b>
<i>L. Nisha Evangelin ; A. Lenin Fred</i>	
<b>MINING HIGH UTILITIES PATTERNS IN A MEDICAL DATASET .....</b>	<b>152</b>
<i>R. Aroul Canessane ; S. Vaishnavi ; G. S. Vishalini</i>	
<b>FORECASTING STOCK PRICE USING SOFT COMPUTING TECHNIQUES.....</b>	<b>158</b>
<i>N. Srinivasan ; C. Lakshmi</i>	
<b>SECRET DATA SHARING ON ENCRYPTED IMAGE &amp; WAVE FILE USING ECC TECHNOLOGY .....</b>	<b>162</b>
<i>M. Gowri ; S. Venkatesh</i>	
<b>SURVEY ON INTEGRATING FACE AND IRIS BIOMETRICS FOR SECURITY MOTIVE USING CHANGE DETECTION MECHANISM .....</b>	<b>166</b>
<i>D. Beulah David ; K. Suganthi</i>	
<b>LITERATURE SURVEY ON EXISTING ANALYTICAL SCHEMES TO OPTIMIZE THE MINING RESULTS USING INCREMENTAL MAP REDUCE .....</b>	<b>172</b>
<i>D. Hemalatha ; B. Bharathi</i>	
<b>IMPROVED VIDEO AUTHENTICATION USING A JOINT SOURCE-CHANNEL ADAPTIVE SCHEME.....</b>	<b>190</b>
<i>V. Swetha ; Sravani Munagala ; S. Suprajaa ; Yuvanica Bharathy</i>	
<b>GPS BASED TRACKING SYSTEM FOR TRANSIT OBJECTS .....</b>	<b>194</b>
<i>K. Dhinakaran ; S. Srinath ; S. Sriram ; R. Venkateshwar</i>	
<b>SMART DEVICE TO HELP PEOPLE WITH DEMENTIA .....</b>	<b>202</b>
<i>D. K. Aarthy ; Akshita Pingle ; G. Dancy Sudha ; V. R. Sushmitha</i>	
<b>CUSTOMER MANAGEMENT MODEL FOR TELECOMMUNICATION SERVICES .....</b>	<b>207</b>
<i>B. Udaya ; T. Indhumathi ; R. Amrutha Varshini ; S. Sathish Kumar</i>	
<b>SYSTEM TO DETECT FIRE UNDER SURVEILLANCED AREA.....</b>	<b>214</b>
<i>D. Jayashree ; S. Pavithra ; G. Vaishali ; J. Vidhya</i>	
<b>REPUTATION-BASED TRUST MANAGEMENT IN CLOUD USING A TRUSTED THIRD PARTY .....</b>	<b>220</b>
<i>D. K. Aarthy ; M. Aarthy ; K. Afritha Farhath ; S. Lakshana ; V. Lavanya</i>	
<b>IMPROVED DEDUPLICATION WITH KEYS AND CHUNKS IN HDFS STORAGE.....</b>	<b>226</b>
<i>S. Pradeep Kumar ; A. Aswini ; M. Kavithadevi ; S. Ramya</i>	
<b>ANTI-THEFT AND TRACKING MECHANISM FOR VEHICLES USING GSM AND GPS .....</b>	<b>252</b>
<i>M. Geetha ; T. Priyadarshini ; B. Sangeetha ; S. Sanjana</i>	
<b>DETECTION AND AVOIDANCE OF ATTACKER USING HONEY WORDS IN PURCHASE PORTAL .....</b>	<b>260</b>
<i>P. Baby Shamini ; E. Dhivya ; S. Jayasree ; M. Pavithra Lakshmi</i>	
<b>PREVENTING DATA OVER-COLLECTION USING DYNAMIC PERMISSION MAPPING IN MOBILE CLOUD FRAMEWORKS.....</b>	<b>264</b>
<i>Geetha ; T. Chandru ; S. Dinesh Ram ; A. Praveen</i>	
<b>AUTOMATIC TUMOR SEGMENTATION USING CONVOLUTIONAL NEURAL NETWORKS.....</b>	<b>268</b>
<i>A. Sankari ; S. Vigneshwari</i>	
<b>PROPHECY OF SHARE MARKET PRICE BY USING BLACK SCHOLES MODEL .....</b>	<b>294</b>
<i>R. Gnanavel ; O. Pandithurai ; K. S. Hareni ; K. Jayalakshmi</i>	
<b>SECURITY PROTOCOLS IN WSN: A SURVEY .....</b>	<b>301</b>
<i>B. Ayyappan ; P. Mohan Kumar</i>	
<b>A SURVEY ON VARIOUS FILE SHARING METHODS IN P2P NETWORKS .....</b>	<b>305</b>
<i>S. Vimal ; S. K. Srivatsa</i>	
<b>CONCERNING DEPENDABLE PROTECTED AND EFFICIENT CLOUD STORE THROUGH CONFLUENT DISTRIBUTION.....</b>	<b>311</b>
<i>A. Ragavi ; K. Karthika ; S. Divya ; A. Kalai Selvi ; R. Ramakrishnan</i>	
<b>SELF ORGANIZED INTELLIGENT NODE FOR DECISION MAKING IN SENSOR NETWORK.....</b>	<b>315</b>
<i>A. Gnana Soundari ; V. L. Jyothi</i>	
<b>A STUDY ON AUTOMATED ALGORITHM FOR IMAGE DETECTION AND MEASUREMENT .....</b>	<b>318</b>
<i>L. K. Shoba ; P. Mohan Kumar</i>	
<b>EFFECTIVE EYE PUPIL LOCALIZATION WITH ENHANCED SHAPE ISOTOPE CORNEA CURVATURE TECHNIQUE .....</b>	<b>321</b>
<i>G. Sumathy ; Arokia Renjith</i>	

<b>AN INTELLIGENT PACKET FORWARDING IN ROUTER USING SELF LEARNING CLASSIFIER</b> .....	324
<i>J. Nithisha ; J. Vinisha</i>	
<b>E-VOTING SYSTEM USING BIOMETRIC TESTAMENT AND CLOUD STORAGE</b> .....	336
<i>T. Illakiya ; S. Karthikeyan ; U. Maharaja Velayutham ; N. T. Ravi Devan</i>	
<b>AGRO-TECH: A DIGITAL MODEL FOR MONITORING SOIL AND CROPS USING INTERNET OF THINGS (IOT)</b> .....	342
<i>O. Pandithurai ; S. Aishwarya ; B. Aparna ; K. Kavitha</i>	
<b>THIRD-PARTY AUDITING FOR CLOUD SERVICE PROVIDERS IN MULTICLOUD ENVIRONMENT</b> .....	347
<i>T. Indhumathil ; N. Aarthy ; V. Dhanalakshmi Devi ; V. N. Samyuktha</i>	
<b>DYNAMIC TRAFFIC MANAGEMENT SYSTEM USING INFRARED (IR) AND INTERNET OF THINGS (IOT)</b> .....	353
<i>L. Paul Jasmine Rani ; M. Khoushik Kumar ; K. S. Naresh ; S. Vignesh</i>	
<b>VOICE CONTROLLED HOME AUTOMATION SYSTEM USING NATURAL LANGUAGE PROCESSING (NLP) AND INTERNET OF THINGS (IOT)</b> .....	368
<i>Paul Jasmin Rani ; Jason Bakthakumar ; B. Praveen Kumaar ; U. Praveen Kumaar ; Santhosh Kumar</i>	
<b>EMBEDDING DATA IN AUDIO SIGNALS USING HSA-EMD ALGORITHM</b> .....	384
<i>R. Senthamizh Selvi ; R. Kishore ; G. R. Suresh ; S. Kanaga Suba Raja</i>	
<b>IDENTIFICATION AND DETECTING OF ATTACKER IN A PURCHASE PORTAL USING HONEYWORDS</b> .....	389
<i>J. Brindtha ; K. R. Hithaeishini ; R. Komala ; G. Abirami ; U. Arul</i>	
<b>IMPROVING THE EFFICIENCY FOR EXTRACTING HIGH UTILITY SEQUENTIAL PATTERN</b> .....	394
<i>Raushan Kumar ; R. Aroul Canessane</i>	
<b>FINITE-TIME AND SAMPLED-DATA SYNCHRONIZATION OF DELAYED MARKOVIAN JUMP COMPLEX DYNAMICAL NETWORKS BASED ON PASSIVE THEORY</b> .....	401
<i>J. Yogambigai ; M. Syed Ali</i>	
<b>AN AUTOMATED HANDWRITTEN SIGNATURE DETECTION APPROACH FOR E-SECURITY PURPOSES</b> .....	409
<i>Pritam Mondai ; Nirmal Kundu</i>	
<b>ENERGY CONSUMPTION ARCHITECTURE FOR WIRELESS SENSOR NETWORKS WITH DIFFERENT CLUSTERS</b> .....	414
<i>K. Praghash ; R. Ravi</i>	
<b>AN EFFICIENT IMAGE WATERMARKING PROTOCOL BASED ON COMPOSITE IMAGE REPUDIATION</b> .....	419
<i>R. Dhanalakshmi ; B. Muthukumar</i>	
<b>INTEGRITY VERIFICATION OF OUTSOURCED FILES USING HADOOP</b> .....	423
<i>J. Jospin Jeya ; E. Kannan</i>	
<b>MOBILE BASED DATA RETRIEVAL USING RDF AND NLP IN AN EFFICIENT APPROACH</b> .....	427
<i>N. Srinivasan ; Anandaraj Selvaraj</i>	
<b>WOT BASED ROUTING PROTOCOL FOR THE HOME DIAGNOSTIC INSTRUMENTS</b> .....	429
<i>B. C. Blessing Solomon ; Sharmila Mary Aral</i>	
<b>AN EFFECTUAL INFORMATION PROBITY WITH TWO TPAS IN CLOUD STORAGE SYSTEM</b> .....	432
<i>Smita Patil ; Neha Rai</i>	
<b>HOME AND OFFICE AUTOMATION SYSTEM-SURVEY</b> .....	435
<i>V. Gobinath ; L. Mary Gladence ; S. Hari Haran ; R. Sathiyavathi ; V. Maria Anu</i>	
<b>OPTIMAL POWER FLOW WITH FACTS DEVICES USING A NOVEL GREY WOLF ALGORITHM</b> .....	501
<i>Madhu Singh ; Susanta Dutta ; Provas Kumar Roy</i>	
<b>LOAD FREQUENCY CONTROL OF MULTI AREA POWER SYSTEM WITH DE-REGULATION USING OKHA</b> .....	507
<i>Leena Goswami ; Soumen Biswas ; Susanta Dutta ; Provas Kumar Roy</i>	
<b>SHUNT BASED ACTIVE POWER FACTOR CORRECTION CIRCUIT FOR DIRECT TORQUE CONTROLLED PMSM DRIVE</b> .....	517
<i>R. Gokulapriya ; Jayarama Pradeep</i>	
<b>COMPARATIVE ANALYSIS OF CALCULATION OF SOLAR PANEL EFFICIENCY DEGRADATION</b> .....	522
<i>Trupti G. Patil ; S. Asokan</i>	
<b>BIDIRECTIONAL DUAL INVERTER ALGORITHM FOR GRID TIED MICROGRID SYSTEMS</b> .....	526
<i>Paulose Thomas</i>	

<b>OPTIMALLY LOCATING MICROGRID FOR THE MINIMIZATION OF LOSSES</b> .....	530
<i>R. Manimegalai ; S. Visalakshi ; S. Leela Devi</i>	
<b>SIMULATION AND INVESTIGATION OF MULTIPLE MAXIMA SEARCH MPPT ALGORITHM WITH HIGH GAIN DC-DC BOOST CONVERTER</b> .....	539
<i>S. Harika ; R. Seyezhai</i>	
<b>PV POWERED QUASI Z-SOURCE INVERTER FOR AGRICULTURAL WATER PUMPING SYSTEM</b> .....	544
<i>B. Arunkumaran ; C. S. Ajin Sekhar ; V. Bala</i>	
<b>OPTIMAL LOCATION OF SHUNT COMPENSATING FACTS DEVICE FOR SOLVING ORPD PROBLEM USING HYBRID CHEMICAL REACTION OPTIMIZATION</b> .....	550
<i>Leena Goswami ; Susanta Dutta ; Provas Kumar Roy</i>	
<b>NANOSTRUCTURED ZNO AND NATURAL DYE BASED DSSC FOR EFFICIENCY ENHANCEMENT</b> .....	556
<i>Diana Goswami ; Dola Sinha ; Debasis De</i>	
<b>POWER AND FREQUENCY CONTROL OF A WIND ENERGY POWER SYSTEM USING ARTIFICIAL BEE COLONY ALGORITHM</b> .....	561
<i>Dipesh Kumar ; Anirban Mishra ; Kalyan Chatterjee</i>	
<b>A RELIABILITY ASSESSMENT MODEL OF A WIND FARM FOR GENERATION ADEQUACY STUDIES OF WIND INTEGRATED POWER SYSTEM</b> .....	566
<i>Asish Roy ; Subhendu Sekhar Sahoo ; Kalyan Chatterjee</i>	
<b>ANALYSIS OF HARMONICS AND NEUTRAL TO GROUND (N TO G) VOLTAGE DIMINUTIONUSING ISOLATION TRANSFORMER</b> .....	571
<i>Swati P. Ghayal ; Shruti Gour</i>	
<b>SOLAR BASED FIFTEEN LEVEL INVERTER TO ENHANCE POWER QUALITY</b> .....	575
<i>Krishna. D. Tiwari ; Sanjay. A. Deokar</i>	
<b>EXPLORATION OF FAULT CURRENT LIMITING TRANSFORMER USING VARIABLE REACTANCE</b> .....	580
<i>M. Kendresomnath ; C. R. Lakade</i>	
<b>ANALYSIS OF MODIFIED THREE-PHASE FOUR-WIRE UPQC DESIGN</b> .....	586
<i>Siddharthi Lahunikam ; K. Kamal Sandeep</i>	
<b>POWER SYSTEM ADVANCEMENT WITH UTILITY CUSTOMER INTERFACE SYSTEM</b> .....	591
<i>T. Jesintha Mary ; K. V. Ragavendran ; S. Raynier Raja ; Z. Mohamed Saqib</i>	
<b>NEXT GENERATION UMBRELLA USING SOLAR POWER WITH MPPT USING FUZZY LOGIC</b> .....	595
<i>S. Sakthi ; P. Rajarajeswari</i>	
<b>IMPLEMENTATION OF BASIC MPPT TECHNIQUES FOR ZETA CONVERTER</b> .....	601
<i>U. Jayashree ; R. H. Pearl Nightingale ; S. Divya</i>	
<b>WIND ENERGY BASED ASYMMETRICAL HALF BRIDGE FLYBACK CONVERTER FOR BLDC MOTOR</b> .....	605
<i>R. Ramkmar ; A. Arun Vikram</i>	
<b>A THREE PHASE HIGH FREQUENCY LINK PWM CONVERTER USING SOFT SWITCHING TECHNIQUES</b> .....	611
<i>V. Reena Joshi Vince ; H. S. Manjula</i>	
<b>ADVANCE METERING INFRASTRUCTURE FOR SMART GRID USING GSM</b> .....	619
<i>K. S. Kavithakumari ; P. Pravina Paul ; E. Catherineamalapriya</i>	
<b>GSM VIGILANCE FOR ELECTRONIC BANKING</b> .....	623
<i>P. Md. Shariff ; V. Anil Kumar ; M. Preethi Pauline Mary ; V. Sivachidambaranathan</i>	
<b>FABRICATION OF SENSOR OPERATED MOBILE PLATFORM FOR PHYSICALLY CHALLENGED PEOPLE</b> .....	629
<i>J. Femila Roseline ; S. Maria Xavier Jespaul ; J. Navis Macton</i>	
<b>ADVANCED AUTOMATION CONTROL IN AN AMBULANCE UNDER EMERGENCY CONDITION</b> .....	632
<i>Leila Sai Krishna ; Samineni Vijay Chowdary ; M. Pushpavalli ; P. Sivagami</i>	
<b>SIMO TOPOLOGY BASED RESIDENTIAL INVERTER SYSTEM FOR ENHANCED RENEWABLE ENERGY UTILIZATION</b> .....	637
<i>Gopakumar Pathirikkat ; J. Drishya ; Anjana Suresh ; Kavaya Sasi ; Binku Thomas ; Ashwin James</i>	
<b>RADIO FREQUENCY IDENTIFICATION TECHNOLOGY FOR ADVANCED LIBRARY MANAGEMENT</b> .....	641
<i>V. Senthil Nayagam ; Saikrishna Vedullapalli ; Mamidi Saikrishna ; R. S. Sivakumar</i>	
<b>SAG MITIGATION OF VSD USING T-SOURCE INVERTER</b> .....	645
<i>T. Tharani ; J. Xavi Ahisha Ancy ; G. Bakiyalakshmi</i>	

<b>CONDITION MONITORING AND SENSOR BASED ROBUST PROTECTION FOR INVERTER FED INDUCTION MOTOR DRIVE SYSTEM.....</b>	<b>649</b>
<i>C. Sravani ; V. L. K. Chaitanya ; M. W. Abitha</i>	
<b>GRID TIED INVERTER FOR DIRECT DRIVE PMSG BASED WIND ENERGY CONVERSION SYSTEM.....</b>	<b>653</b>
<i>V. Archana ; P. Subha Karuvelam</i>	
<b>MICROCONTROLLER BASED CONSUMER END ENERGY CONSUMPTION CONTROL FROM SUBSTATION USING PLCC.....</b>	<b>659</b>
<i>M. Sathishbaboo ; R. Chandru ; K. Vanitha</i>	
<b>HARMONICS ANALYSIS IN IMPEDANCE Z-SOURCE INVERTER FOR WIND DRIVEN SELF — EXCITED INDUCTION GENERATOR APPLICATIONS.....</b>	<b>687</b>
<i>M. Sasikumar</i>	
<b>POWER QUALITY IMPROVEMENT BY MITIGATION OF CURRENT HARMONICS USING D — STATCOM.....</b>	<b>691</b>
<i>H. Prasad ; T. D. Sudhakar</i>	
<b>COMPUTATION OF OVER VOLTAGE FOR INSULATION COORDINATION OF GAS INSULATED SUBSTATION.....</b>	<b>709</b>
<i>S. Sakthi ; D. Purusothaman ; L. Veeragavan ; P. Rajarajeswari ; V. Sridevi</i>	
<b>A DESIGN OF FIREFIGHTING AND SUPERVISING SELF-SUFFICIENT ROBOTS.....</b>	<b>858</b>
<i>P. Shanmuga Prabha ; N. Shivaanivarsha</i>	
<b>SECURITY SYSTEM USING RASPBERRY PI.....</b>	<b>863</b>
<i>K. H. Shakthi Murugan ; V. Jacintha ; S. Agnes Shifani</i>	
<b>WAREHOUSE MANAGEMENT SYSTEM USING MICROPROCESSOR BASED MOBILE ROBOTIC APPROACH.....</b>	<b>868</b>
<i>P. Ganesan ; G. Sajiv ; L. Megalan Leo</i>	
<b>DEBLURRING TECHNIQUES FOR NATURAL IMAGES — A COMPARATIVE AND COMPREHENSIVE STUDY.....</b>	<b>873</b>
<i>P. Ganesan ; G. Sajiv ; L. Megalan Leo</i>	
<b>A NOVEL DESIGN FOR LOW POWER RE-RAM BASED NON-VOLATILE FLIP FLOP USING CONTENT ADDRESSABLE MEMORY.....</b>	<b>879</b>
<i>B. Hemavathy ; V. Meenakshi</i>	
<b>DESIGN OF A LOW-POWER AVERAGE-8T SRAM CELL USING TRANSMISSION GATE.....</b>	<b>884</b>
<i>N. Vinitha ; K. R. Kavitha</i>	
<b>CIELUV COLOR SPACE FOR IDENTIFICATION AND SEGMENTATION OF DISEASE AFFECTED PLANT LEAVES USING FUZZY BASED APPROACH.....</b>	<b>889</b>
<i>P. Ganesan ; G. Sajiv ; L. Megalan Leo</i>	
<b>DESIGN AND OPTIMIZATION OF VARIOUS COUPLING MICRO STRIP RING RESONATORS.....</b>	<b>895</b>
<i>D. Rajeswart ; A. Sri Ranjini ; S. Thenkuzhali</i>	
<b>MIMO COGNITIVE RADIO CAPACITY IN FLAT FADING CHANNEL.....</b>	<b>915</b>
<i>M. P. Chitra ; S. Divya ; M. Premkumar ; V. Tamilselvi ; N. Karthika</i>	
<b>HIGH SECURE DIGITAL IMAGE STEGANOGRAPHY FOR SECRETE COMMUNICATION.....</b>	<b>920</b>
<i>V. Keral Shalini ; T. Abirami</i>	
<b>ANALYSING THE CONFLICT OF PRIVACY IN GEO SOCIAL DATA NETWORK USING CRYPTOGRAPHY.....</b>	<b>923</b>
<i>Agnus S. Swarnanisha Lakshmi ; A. Berlin</i>	
<b>T-SHAPE POLARIZATION RECONFIGURABLE PATCH ANTENNA FOR COGNITIVE RADIO.....</b>	<b>927</b>
<i>M. Paranthaman</i>	
<b>DESIGN AND ANALYSIS OF INTERDIGITAL MICROSTRIP BANDPASS FILTER FOR CENTRE FREQUENCY 2.4 GHZ.....</b>	<b>930</b>
<i>R. Divya Bharathi ; J. Evangeline Yamini ; A. Evangeline ; D. Badri Narayanan</i>	
<b>AN EXTENSIVE RESOLUTION OF ATM SECURITY SYSTEMS.....</b>	<b>934</b>
<i>V. M. E. Jacintha ; S. Jamuna Rani ; J. Glory Beula ; J. Jeba Johnsly</i>	
<b>SMART ELECTRONIC VOTING SYSTEM BASED ON BIOMETRIE IDENTIFICATION-SURVEY.....</b>	<b>939</b>
<i>J. Deepika ; S. Kalaiselvi ; S. Mahalakshmi ; S. Agnes Shifani</i>	
<b>REAL TIME MONITORING OF THE ENVIRONMENTAL PARAMETERS OF AN AQUAPONIC SYSTEM BASED ON INTERNET OF THINGS.....</b>	<b>943</b>
<i>M. Manju ; V. Karthik ; S. Hariharan ; B. Sreekar</i>	
<b>POWER GENERATION AND ENERGY MANAGEMENT IN RAILWAY SYSTEM.....</b>	<b>949</b>
<i>D. Rajapriyanka ; G. Shanmugapriya ; R. Sabashini ; V. M. E. Jacintha</i>	
<b>FLUX CONTROLLED BLDC MOTOR FOR AUTOMATED GLASS CLEANING ROBOT.....</b>	<b>955</b>
<i>Tushar Anand ; Sunny Kumar Kushwaha ; S. Emalda Roslin ; N. M. Nandhiitha</i>	

<b>A STUDY ON DENOISING TECHNIQUES ELIMINATING IMPULSE NOISE AND ARTIFACTS</b> .....	960
<i>J. Jenifer ; K. Vasanth ; G. Harshitha ; N. M. Nandhitha</i>	
<b>SUDDEN UNINTENDED ACCELERATION AVOIDANCE AND DROWSINESS DETECTOR FOR AUTOMOBILE ACCIDENTS PREVENTION</b> .....	964
<i>S. Priyanka ; G. Hemalatha ; C. Saranya</i>	
<b>A NOVEL DESIGN AND ANALYSIS OF REVERSIBLE BARALLEL SHIFTER USING NEW FF-GATE</b> .....	984
<i>S. Ranjith ; T. Ravi</i>	
<b>DESIGN OF PID CONTROLLER FOR CHEMICAL PROCESS-HEURISTIC ALGORITHM APPROACH</b> .....	1001
<i>S. Suganya ; P. Deepa ; V. Rajnikanth</i>	
<b>ANALYSIS OF MEDICAL IMAGE AND HEALTH INFORMATICS USING BIGDATA</b> .....	1005
<i>G. Shwetha ; P. R. Visali Lakshmi ; N. Sri Madhava Raja</i>	
<b>PERFORMANCE EVALUATION OF EMBEDDED COLOR QR CODES ON LOGOS</b> .....	1009
<i>S. Nandhini</i>	
<b>ARTIFICIAL CARDIAC PACEMAKER</b> .....	1015
<i>V. Jeyalakshmi Devi</i>	
<b>WEARABLE SAFETY WRISTBAND DEVICE FOR ELDERLY HEALTH MONITORING WITH FALL DETECT AND HEART ATTACK ALARM</b> .....	1018
<i>T. Elakkiya</i>	
<b>DESIGN OF MULTI-VALUED TERNARY LOGIC GATES BASED ON EMERGING SUB-32NM TECHNOLOGY</b> .....	1023
<i>P. A. Gowrisankar</i>	
<b>DESIGN OF INTELLIGENT CONTROLLER FOR PEM FUEL CELL</b> .....	1050
<i>R. Geethanjali ; R. Sivakumar</i>	
<b>IMPROVEMENT IN DYNAMIC RESPONSE OF QUASI Z SOURCE INVERTER FED INDUCTION MOTOR USING FRACTIONAL ORDER PID CONTROLLER</b> .....	1067
<i>P. Shunmugakani ; D. Kirubakaran</i>	
<b>NAVIGATIONAL AIDING SYSTEM FOR VISUALLY IMPAIRED</b> .....	1072
<i>M. Micheal Priyanka ; M. Michael Dharsana</i>	
<b>DESIGN OF SUPERHEATED STEAM TEMPERATURE CONTROL USING FUZZY LOGIC CONTROLLER</b> .....	1076
<i>V. Vijayalakshmi</i>	
<b>ARDUNIO CONTROLLED LANDMINE DETECTION ROBOT</b> .....	1077
<i>V. Abilash ; J. Paul Chandra Kumar</i>	
<b>DESIGN AND FABRICATION OF PROSTHETIC HUMAN HAND USING EEG AND FORCE SENSOR WITH ARDUINO MICRO CONTROLLER</b> .....	1083
<i>M. Chandra Mohan ; M. Purushothaman</i>	
<b>CLOSED LOOP SEQUENTIAL FUEL INJECTION BASED ON ENGINE SPEED, TORQUE AND AFR</b> .....	1087
<i>A. Ealumalai ; V. Natarajan ; L. Ranganathan ; S. Gugainamasivayam</i>	
<b>GLOBAL WARMING IMPACT AND PERFORMANCE ENHANCEMENT OF PROPANE/ISOBUTANE MIXTURES AS ALTERNATIVE IN AIR CONDITIONING SYSTEMS</b> .....	1111
<i>V. Natarajan</i>	
<b>EXPERIMENTAL INVESTIGATION OF A AGRICULTURAL DIESEL ENGINE FUELLED WITH BLENDS OF CSO METHYL ESTER WITH DIESEL</b> .....	1117
<i>L. Ranganathan</i>	
<b>PERFORMANCE ANALYSIS OF ADDITION OF HYDROGEN TO COMPRESSION IGNITION DIESEL ENGINE WITH BIO DIESEL BLENDS</b> .....	1123
<i>V. Thanigaivelan ; M. Loganathan</i>	
<b>Author Index</b>	