2016 International Conference on Computing, Communication and Automation (ICCCA 2016)

Greater Noida, India 29-30 April 2016

Pages 1-856



IEEE Catalog Number: ISBN:

CFP16IWY-POD 978-1-5090-1667-9

Copyright \odot 2016 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 publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP16IWY-POD

 ISBN (Print-On-Demand):
 978-1-5090-1667-9

 ISBN (Online):
 978-1-5090-1666-2

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Phone: (845) 758-0400 Fax: (845) 758-2633

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



WEB INTELLIGENCE & SEMANTICS & DATA MINING

| S. No. | Paper ID | Title | Page No. |
|--------|----------|---|----------|
| 1 | 19 | A Novel Approach to Sentence Clustering: Deepak Sahoo and Rakesh Balabantaray | 1 |
| 2 | 43 | Social Media Based Linking Approach for finding the Effectiveness of the Social Issues Rupesh Mishra and Kanika Saini | 7 |
| 3 | 78 | Implementation of an Improved Algorithm for Frequent Itemset Mining using Hadoop Ruchi Agarwal, Sunny Singh and Satvik Vats | 13 |
| 4 | 82 | Query Processing On Inconsistent Data using Neutrosophic Set Soumitra De, Jaydev Mishra and Sharmistha Ghosh | 19 |
| 5 | 115 | Semantic and Keyword Based Web Techniques in Information Retrieval Vajenti Mala and D.K Lobiyal | 23 |
| 6 | 145 | An Algorithm to Mining Sub-Graphs from Authors Graph Using Graph Mining Techniques BapujiRao and Saroja Nanda Mishra | N/A |
| 7 | 155 | Adaptive System to Learn and Recognize Emotional State of Mind Neeru Rathee, Sagar Gupta and Ashutosh Vaish | 32 |
| 8 | 193 | Big Heterogeneous Data and Its Security: A Survey Sanchita Arora, Mithun Kumar, Prashant Johri and Sanjoy Das | 37 |
| 9 | 244 | A Method for Recognizing Malignant Facebook application Kiran Bhise and R Shishupal | 41 |
| 10 | 317 | Sapatial Data Analysis with ArcGIS and MapReduce Hari Singh and Seema Bawa | 45 |
| 11 | 361 | Big Data Analytics for Security and privacy challenges Aditya Dev Mishra, Youdhabeer Singh | 50 |
| 12 | 386 | Answering Graph Pattern Query using Incremental Views Komal Singh and Vikram Singh | 54 |
| 13 | 392 | Big Data Security Issues and challenges Neetu Chaudhari and Satyajee Srivastava | 60 |
| 14 | 408 | Documents Ranking Using New Learning Approach Sanjeev Patel, Kriti Khanna and Vishnu Sharma | 65 |
| 15 | 424 | Effective collaborative movie recommender system using asymmetric user similarity and matrix factorization Rahul Katarya and Om Prakash Verma | 71 |
| 16 | 430 | Two-phase Entropy based approach to Big Data Anonymization Ashish Ranjan and Prabhat Ranjan | 76 |
| 17 | 447 | Stock Market Prediction Using Hybrid Approach Vivek Rajput, Sarika Bobde | 82 |
| 18 | 466 | Observations on Factors Affecting Performance of MapReduce based Apriori on Hadoop Cluster Sudhakar Singh, Rakhi Garg and P. K. Mishra | 87 |
| 19 | 537 | Insight Of Big Data Analytics In Healthcare Industry Satwik Sabharwal, Samridhi Gupta and Thirunavukkarasu K. | 95 |
| 20 | 550 | e-commerce website quality assessment based on usability Tanya Singh, Sachin Malik andDarothi Sarkar | 101 |
| 21 | 561 | PERSO-Retailer: Modeling the Retailer's Business Data Toward Recommender System of Retailers' Marketing Plan for Personalized CMS Shrooa Alsenan and Nesrine Zemirli | 106 |
| 22 | 595 | METHS: Mapping from English Language to Hindi Language for Secure Commercial Transactions Rahul Johari, Anisha Gupta and Sakshi Semwal | 112 |
| 23 | 599 | CRIB: Cyber Crime Investigation, Data Archival and Analysis using Big Data Tool Privanka Dhaka and Rahul Johari | 117 |

| 24 | 600 | New Approach for Clustering of Big Data: DisK-Means Anu Saini, Jagrit Minocha, Jaypriya Ubriani and Dhruv Sharma | 122 |
|----|-----|--|-----|
| 25 | 639 | Formalization of e-Commerce Patterns using State-Based and Event-Based Approaches Ashish Dwivedi, Ashraf Gardizy and S. K. Rath | 127 |
| 26 | 640 | A Comparison of Linear Discriminant Analysis and Ridge Classifier on Twitter Data Anagh Singh, Shiva Prakash B and K. Chandrasekaran | 133 |
| 27 | 660 | CutShort: A Hybrid Sorting Technique Ashish Garg, Sudhir Goswami and Versha Garg | 139 |
| 28 | 686 | Cyber Ethics and Cyber Crime: a deep dwelved study into legality, ransomware, underground web and bitcoin wallet Rhyme Upadhyaya and Aruna Jain | 143 |
| 29 | 729 | Techniques for Sentiment Analysis of Twitter Data: A Comprehensive Survey Mitali Desai and Mayuri A. Mehta | 149 |
| 30 | 760 | Best Effort Query Answering in Dataspaces on Unstructured Data Vishal Sheokand and Vikram Singh | 155 |
| 31 | 770 | Strategies for Web Application Development Methodologies Keshav Gupta and Ravi Sharma | 160 |
| 32 | 774 | USER PREFERENCE BASED PAGE RANKING ALGORITHM Devika Singh | 166 |
| 33 | 778 | PREDICTIVE ANALYSIS OF DENGUE AND MALARIA Sanjana Das and Abha Thakral | 172 |
| 34 | 786 | New Technique for Detecting Fraudulent Transactions using Hybrid Network consisting of Full-Counter Propagation Network and Probabilistic Network Sonika Bhardwaj, Abhay Pratap, Mukul Chauhan and Dr. Anurag Dixit | 177 |
| 35 | 787 | A Comparative Study of Different Frequent Pattern Mining Algorithm For Uncertain Data Neha Goyal and S K Jain | 183 |
| 36 | 827 | DATA MINING AS A TOOL FOR DETECTING ADVERSE EFFECTS OF DRUGS Dipali and Yogita | 188 |
| 37 | 851 | An Improvement over Direct Coding Technique to Compress Repeated & Non-Repeated Nucleotide Data Govind Prasad Arya, Devendra Prasad, Rajendra Bharti andSandeep Singh Rana | 193 |
| 38 | 853 | Integrating Data Mining with Computer Games Hycinta Andrat and Nazneen Ansari | 197 |
| 39 | 855 | Data Clustering In Wireless Sensor Network Implemented On Self Organization Feature Map (SOFM) Neural Network Mohit Mittal and Krishan Kumar | 202 |
| 40 | 881 | Information Retrieval in Big Data Using Evolutionary Computation: A Survey Shadab Irfan and B V Babu | 208 |
| 41 | 890 | Investigation of Different Approaches, Feasible Solutions, and Estimates for Disparate Enterprise Solution Synchronization Nazneen Ansari and Dr. G. T. Thampi | 214 |
| 42 | 901 | Recommender System using Hybrid Approach Sanya Sharma, Aakriti Sharma, Yamini Sharma and Manjot Bhatia | 219 |
| | | · | |

EVOLUTIONARY COMPUTING

| S. No. | Paper ID | Title | Page No. |
|--------|----------|--|----------|
| 43 | 126 | HYBRID SWARM INTELLIGENCE FOR VLSI FLOORPLAN Amarjot Kaur and Dr. Sandeep Singh Gill | 224 |
| 44 | 165 | CAMPUS - Cognitive Access of Media with Power control for Unlicensed users through Switching Saraswati Mishra, Piyush Chandekar, Dr. Prabhjot Kaur | 230 |
| 45 | 174 | Gesture Recognition Television Control System Using Color Histograms Sang Hyuk Park, Sang Jun Lee, Hong Duck Eom and Jae Wook Jeon | 235 |

| | | | 1 |
|----|-----|--|-----|
| 46 | 205 | A Survey of Particle Swarm Optimization and Random Forest based Land Cover Classification Shahana K.,Dr. Subhajit Ghosh,Dr. C. Jeganathan | 241 |
| 47 | 242 | Ant-Lion Optimization Algorithm for Solving Real Challenging Constrained Engineering Optimization Problems Indrajit N.Trivedi, Motilal Bhoye, Siddharth A. Parmar, Pradeep Jangir, Narottam Jangir, Arvind Kumar | N/A |
| 48 | 243 | L'EVY Flight Particle Swarm Optimization (LFPSO) Santosh Gupta, Manoj Singh, Kavita Sharma, Varsha Chhamunya, Harish Sharma | 252 |
| 49 | 245 | Understanding Requirement Prioritization Techniques Heena Ahuja, Sujata, G.N. Purohit | 257 |
| 50 | 297 | A Novel Selective Ensemble Algorithm Based on Approximate Reducts and Optimal Sampling Youqiang Zhang, Feng Jiang, Junwei Du, Guozhu Liu | 263 |
| 51 | 313 | Poker Hand Classification Suraiya Jabin | 269 |
| 52 | 325 | Weighted Reduct Selection Metaheuristic Based Approach for Rules Reduction and Visualization Hanaa Ismail Elshazly, Ahmed Fouad Ali, Hamdi Mahmoud, Abeer Mohamed Elkorany and Aboul Ella Hassanien | 274 |
| 53 | 340 | A Method to Predict Diagnostic Codes for Chronic Diseases using Machine Learning Techniques Deepa Gupta, Sangita Khare, Ashish Aggarwal | 281 |
| 54 | 341 | Enzyme vs. Non-Enzyme Classification Based on Principal Component Analysis and AdaBoost Classifier Mahir M. Sharif; Alaa Tharwat; Aboul Ella Hassanien; Hesham A. Hefny | 288 |
| 55 | 406 | A Framework for Recognition of Hand Gesture in Static Postures D.K. Vishwakarma, Priyadarshani, Kuldeep Singh | 294 |
| 56 | 412 | Code Clones Detection Using Machine Learning Technique: Support Vector Machine Shruti Jadon | 299 |
| 57 | 420 | Analysis of Weight Initialization Routines for Conjugate Gradient Training algorithm with Fletcher- Reeves Updates Sarfaraz Masood, M. N. Doja Pravin Chandra | 304 |
| 58 | 434 | Fitness Based Gravitational Search Algorithm Aditi Guptaa, Nirmala Sharmab and Harish Sharmac | 309 |
| 59 | 439 | Differential Evolution Algorithm using Stochastic Mutation Nikky Choudharya, Harish Sharma, Nirmala Sharma | 315 |
| 60 | 440 | Binomial Crossover Embedded Shuffled Frog Leaping Algorithm Pragya Sharma, Nirmala Sharma and Harish Sharma | 321 |
| 61 | 441 | A Cognitive Method for Object Detectionfrom Aerial Image Naveen Chandra, Ashu Sharma, Jayanta Kumar Ghosh | 327 |
| 62 | 449 | An Improvement in BLEU Metric for English Hindi Machine Translation Evaluation Pooja Malik | 331 |
| 63 | 510 | Semantic Proximity with Linked Open Data: A Concept for Social Media Analytics Yesha Mehta and Dr. Sanjay Buch | 337 |
| 64 | 520 | Non Linear State Estimation using Particle Filter based on Backtracking Search Optimization Abhimanyu Bhateja, Gurjit Singh Walia and Rajiv Kapoor | 342 |
| 65 | 535 | A Framework for Human Recognition using a Multimodel Gait Analysis Approach Chandra Prakash, Anshul Mittal, Shubham Tripathi, Rajesh Kumarand Namita Mittal | 348 |
| 66 | 563 | Predicting Maintainability of Autonomic Software Systems using Fuzzy Logic Ashwini Kumar and Vishu Tyagi | 353 |
| 67 | 575 | Analysing Software Reliability Modelling Aspects Using Soft Computing Methodology Uttara Goyal and Arunima Jaiswal | 358 |
| 68 | 614 | A Genetic Algorithm inspired task scheduling in Cloud Computing Mohit Agarwal and Dr. Gur Mauj Saran Srivastava | 364 |
| 69 | 620 | Real Life Optimization Problems Solving By IUDE Dr Pravesh Kumar, Rani Astya, Millie Pant, Musrrat Ali, Parma Nand | 368 |
| 70 | 651 | Investigating Back Propagation Neural Network for Lip Reading Neeru Rathee | 373 |
| 71 | 746 | A machine learning approach for identification & diagnosing features of Neurodevelopmental disorders using speech and spoken sentences Anjali Pahwa and Gaurav Aggarwal, Ashutosh Sharma | 377 |
| 72 | 813 | Hybrid Genetic Algorithm based Technique to Maximize the Network Lifetime in WSN Vinay Kumar Singh, Vidushi Sharma and Anil Kumar Sagar | 383 |

| 73 | 815 | Forecast of Temperature using Support Vector Machines Abrahán Pérez-Vega, Carlos M Travieso Gonzalez, José G. Hernández-Travieso, Jesús B. Alonso, Malay Kishore Dutta and Anushikha Singh | 388 |
|----|-----|--|-----|
| 74 | 838 | Soft Computing Techniques to Address Various Issues in Wireless Sensor Networks: A Survey Priya Patel and Rutvij Jhaveri | 393 |
| 75 | 911 | Human Behavior Prediction using Facial Expression Subarna Shakya, Suman Sharma and Abinash Basnet | 399 |

UBIQUITOUS COMPUTING & NETWORKING

| S. No. | Paper ID | Title | Page No |
|--------|----------|--|---------|
| 76 | 30 | Performance Analysis and Impact of Different Mobility model on specific configured network with IEEE 802.15.4 for WSNs Parma Nand, Rani Astya and Abdul Wahid Ali | 405 |
| 77 | 31 | Elongate the Lifetime of the Network using Grid Based Cluster with Backbone Spanning Tree for Wireless Sensor Networks Abdul Wahid Ali, Rani Astya and Parma Nand | 411 |
| 78 | 39 | Performance Analysis of Partial CAN based Proposed Algorithm Jun Young Moon, Tae-Won Kim, Do Eon Lee and Jae Wook Jeon | 416 |
| 79 | 40 | Development of Gateway based on BroadR-Reach for Application in Automation Network Tae-Won Kim, Jin Ho Kim, Do Eon Lee, Jun Young Moon and Jae Wook Jeon | 421 |
| 80 | 62 | PERFORMANCE COMPARISON OF VARIOUS ROUTING PROTOCOLS IN WSN AND WBAN Rani Kumari and Parma Nand Astya | 427 |
| 81 | 69 | EtherCAT Network Latency Analysis Vinh Quang Nguyen and Jae Wook Jeon | 432 |
| 82 | 70 | A Game-Theory based Secure Routing Mechanism in Mobile Ad Hoc Network Koushik Majumder, Debjit Das and Anurag Dasgupta | 437 |
| 83 | 113 | Revocable Key Identity Based Encryption Scheme without Key Escrow Problem Swati Gupta ,Vipul Gupta | 443 |
| 84 | 116 | Security Checking in ABPMN Ritu Saluja, Dr Shashi Kant Singh and Dr. Arun Chaturvedi | 449 |
| 85 | 132 | Resolving Security issues with Secured Shared Key Discovery(SSD) Protocol replacing Modified Rivest Scheme Deepthi Haridas, K.C. Emmanuel Sanjay Raj, Sharma Venkataraman and Santanu Chawdhury | 455 |
| 86 | 156 | IPv6 Security Tools - A Systematic Review Atena Shiranzaei and Rafiqul Zaman Khan | 459 |
| 87 | 157 | Application of Elliptic Curve Cryptography in Pretty Good Privacy (PGP) Sanchit Mehrotra and Prof. Arun K. Agrawal | 465 |
| 88 | 175 | Predictive Packet Reception Protocol (PPRP) for Wireless Sensor Networks Ashutosh Tripathi, Reena dadhich, Narendra Yadav | 471 |
| 89 | 196 | Development of a Cross-Layered Protocol Stack for Wireless Sensor Networks for Mobile Object Tracking K. R. Anupama, Tanvi Nitin Jadhav, Edwin Fremiot Mascarenhas, Pranav Pal Lekhi, Abuturab Mohammadi and Vedangi Bhadresh Pathak | 475 |
| 90 | 222 | Integrating RSA Cryptography & Audio Steganography Ankit Gambhir and Sibaram Khara | 481 |
| 91 | 223 | Blocking Probability Based Comparative Analysis of Optical Mesh Networks using Hegons Simulator Ritesh Verma, Parveen Singla and Dr. Jyoti Saxena | 485 |
| 92 | 232 | Formation of Security Association Database (SAD) in Internet Protocol version 6 (IPv6) Dr. S.P Singh, Vishal Bharti, Dr. B.M.K Prasad, Prashant Johri and Mandisha Sharma | 491 |
| 93 | 252 | A Comprehensive Inspection Of Cross Site Scripting Attack Mohit Dayal, Nanhay Singh and Ram Shringar Raw | 497 |
| 94 | 258 | Coverage and Connectivity Preserving Routing in Wireless Sensor Networks: A New Approach Anju Sangwan, Rishipal Singh and Pooja Sawant | 503 |

| 95 | 292 | ObTraP: An Object Tracking Protocol for Wireless Sensor Networks Tauseef Ahmad and Ash Mohammad Abbas | 509 |
|-----|-----|---|-----|
| 96 | 301 | ENTROPY DEVIATION METHOD FOR ANALYZING NETWORK INTRUSION Deepali Virmani, Shweta Taneja, Tanya Chawla, Rachesh Sharma and Rohan Kumar | 515 |
| 97 | 321 | Survey of Hash Security on DSR Routing Protocol Supriya Das and Parmanand Astya | 520 |
| 98 | 322 | Literature Review of Routing Attacks in MANET Ram Kishore Singh and Parmanand Astya | 525 |
| 99 | 353 | Certificateless Aggregate Signature Schemes: A Review Pankaj Kumar, Vishnu Sharma and Gaurav Sharma | 531 |
| 100 | 354 | A Literature Survey on Social Engineering Attacks : Phishing attack Surbhi Gupta, Abhishek Singhal and Akanksha Kapoor | 537 |
| 101 | 400 | REVIEW of PERFORMANCE ANALYSIS of VARIOUS ROUTING PROTOCOLS in MANETS Akansha Chauhan and Vishnu Sharma | 541 |
| 102 | 401 | Energy Efficient Shortest Path Routing Protocol in Underwater Sensor Networks Subrata Sahana, Karan Singh, Sanjoy Das and Rajesh Kumar | 546 |
| 103 | 409 | Throughput Analysis of AQM Schemes Under Low-rate Denial of Service Attacks Sanjeev Patel, Badal Gupta and Vishnu Sharma | 551 |
| 104 | 433 | VANET: Architectures, Research Issues, Routing Protocols, and its Applications Mayank Dixit, Rajesh Kumar and Anil Kumar Sagar | 555 |
| 105 | 454 | Security Issues in Mobile Adhoc Networks: A Survey Paper Dr. Vishnu Sharma and Akansha Vij | 561 |
| 106 | 459 | A Constructive Review of In-Network Caching: A Core Functionality of ICN Anshuman Kalla and Sudhir Kumar Sharma | 567 |
| 107 | 461 | Host based Detection and Analysis of PII stealing Trackers Shivani Thapar, Neetika Srivastava, Dr. Anup Girdhar and Aruna Bhatt | 575 |
| 108 | 509 | A Novel Diamond Search ME Algorithm for Systolic Arrays Ria and Subhash Chandra Yadav | 579 |
| 109 | 523 | Load Balancing Using Game Theory In Cognitive Radio Network Mahua Bhownik and Malathi P. | 582 |
| 110 | 531 | Multi-Strategy based Automated Negotiation: BGP Based Architecture Suraj Awasthi, Sheetal Vij,Debajyoti Mukhopadhyay and Avinash Agrawal | 588 |
| 111 | 545 | Sybil Attack Prevention and Detection in Vehicular Ad hoc Network Aravendra Kumar Sharma, Sushil Kumar Saroj, Sanjeev Kumar, Sachin Kumar Saini | 594 |
| 112 | 583 | Analysis of Cyber Attack Vectors Vijay K Tiwari and Prof. Rajiva Dwivedi | 600 |
| 113 | 594 | Android Phone Forensic: Tools and Techniques Nihar Roy, Anshul Kanchan Khanna and Leesha Aneja | 605 |
| 114 | 636 | Intrusion detection system using Anomaly technique in Wireless Sensor Network Sushant Kumar Pandey, Prabhat Kumar, Jyoti Prakash Singh and Maheshwari Prasad Singh | 611 |
| 115 | 638 | Comparison of Communication Protocols for UAVs and VANETs Prabhu Jyot Singh, Rohan de Silvaand Indra Seher | 616 |
| 116 | 649 | SDN BASED SECURITY SOLUTION FOR LEGISLATIVE EMAIL COMMUNICATIONS: SAFE GUARDING COMMUNICATION Prabath Rupasinghe, Samith Kulathunga, Iain Murray and Krishnadeva Keseva | 620 |
| 117 | 650 | Security and attack analysis for Vehicular Ad hoc Network- A Survey Sanjoy Das, Prashant Johri, Dilendra Shukla and Akash Vaibhav | 625 |
| 118 | 706 | Analysis of Handoff factors in Wireless Networks Sudesh Pahal, Vineet Gulia, Nishank Chauhan and Ashish Goel | 631 |
| 119 | 742 | SURVEY ON SECURITY ISSUES IN MANET Wormhole Detection and Prevention Pawan Sharma and Vishnu Sharma | 637 |
| 120 | 767 | Comparative Performance Analysis of AODV and DSR Routing Protocols under Wormhole Attack in Mobile Ad Hoc Network on Different Node's Speeds Shahjahan Ali and Parma Nand | 641 |
| 121 | 773 | Improvisation Of QoS Using Compression On Scalable Multimedia MANET Sumitra Ranjan Sinha, Pallavi Khatri and Shashikant Gupta | 645 |

| 122 | 790 | A brief survey of Blackhole detection and avoidance for ZRP protocol In MANETs Shivendra Prakash and Abhishek Swaroop | 651 |
|-----|-----|---|-----|
| 123 | 791 | A Study of Position Based VANET Routing Protocols Neha Goel ,Isha Dhyani and Gaurav Sharma | 655 |
| 124 | 808 | WSN in Coffee Cultivation Ravi Kodali, Sreeramya Soratkal and Lakshmi Boppana | 661 |
| 125 | 816 | HMM for Reputation Computation in VANET Aditya Shrivastava, Kapil Sharma and Brijesh Kumar Chaurasia | 667 |
| 126 | 837 | A Fast Hand Off Mechanism using RFID Tags For Vehicular Adhoc Network Sadip Midya, Asmita Roy, Koushik Majumder, Debashis De and Santanu Phadikar | 671 |
| 127 | 841 | Fusion Model for Statistically Dependent Observations in Wireless Sensor Network Sunayana Jadhav and Rohin Daruwala | 677 |
| 128 | 846 | Improving the performance of Key Pre-distribution Scheme in Sensor Network using Clustering of Combinatorics Monjul Saikia and Md Anwar Hussain | 682 |
| 129 | 852 | FLEXIBLE FIXED SET PORTIONING AND PERFORMANCE IMPROVEMENT IN OVSF BASED NETWORKS Vipin Balyan, Davinder Saini and Raghav Bansal | 687 |
| 130 | 885 | Authentication Techniques For E-Commerce Applications: A Review Neha and Kakali Chatterjee | 693 |
| 131 | 903 | Energy Aware Routing Protocol Over Leach on Wireless Sensor Network Rupika Goyal, Shashikant Gupta | 699 |
| 132 | 910 | Analytical Study on Intelligent Information Retrieval System Using Semantic Network Sanjib Sahu, Durga Mahapatra and Rakesh Balabantaray | 704 |

DISTRIBUTED COMPUTING & CLOUD COMPUTING

| S. No. | Paper ID | Title | Page No. |
|--------|----------|---|----------|
| 133 | 29 | A Cross Cloud Scheduling Algorithm at SaaS Level on Rack Space, Go Daddy and Azure Platforms Gurpreet Singh Sandhu, Dr I S Hudiara and Sawtantar Khurmi | 711 |
| 134 | 95 | A New Approach to Design User-driven Security Pricing Model in Cloud Computing Shikha Dogra, Sandeep Sood, Sandeep Mehmi and Sahil Sahil | 719 |
| 135 | 96 | Designing and Analysis of User Profiling System for Cloud Computing Security using Fuzzy guided Genetic Algorithm Sahil Sahil, Sandeep Sood, Sandeep Mehmi and Shikha Dogra | 724 |
| 136 | 129 | Transfer Time-Aware Workflow Scheduling for Multi-Cloud Environment Indrajeet Gupta, Madhu Sudan Kumar and Prasanta K. Jana | 732 |
| 137 | 285 | Optimizing VM Provisioning of Map Reduce tasks on Public Clouds Banpreet Setia and Nidhi Jain | 738 |
| 138 | 580 | Testing in the Cloud: A new challenge Manyeen Kaur | 742 |
| 139 | 592 | A Collaborative Trust Based Model For Peer To Peer System Piyush Chandekar and Shalu Chopra | 747 |
| 140 | 644 | Evolution and analysis of Distributed File Systems in cloud storage: Analytical Survey Dharavath Ramesh, Neeraj Patidar, Gaurav Kumar and Vunnam Teja | 753 |
| 141 | 728 | DCF: A Novel Dynamic Forensic Framework towards Cloud Computing Environment Suchana Datta, Koushik Majumderand Debashis De | 759 |
| 142 | 877 | An advanced forensic readiness model for the cloud environment Bksp Kumar Raju and Geetha G | 765 |
| 143 | 907 | Incremental Checkpoint Based Failure-Aware Scheduling Algorithm in Grid Computing Manjeet Singh | 772 |

SOFTWARE ENGINEERING & INFORMATION SYSTEMS

| S. No. | Paper ID | Title | Page No. |
|--------|----------|--|----------|
| 144 | 27 | A Systematic Assessment of Aspect-Oriented Software Development (AOSD) using JHotDraw Application Pankaj Kumar | 779 |
| 145 | 64 | Web Testing using UML Environment Models Jyoti Arora | 785 |
| 146 | 172 | A Methodology for Ranking of MAS Reliability Measures Prashant Kumar Mishra, Raghuraj Singh and Vibhash Yadav | 790 |
| 147 | 180 | A Differential Evolution based Approach to generate Test Data for Data-Flow Coverage Sapna Varshney and Monica Mehrotra | 796 |
| 148 | 228 | Web Application's Performance Testing Using HP LoadRunner and CA Wily Introscope Tools Rijwan Khan and Mohd Amjad | 802 |
| 149 | 333 | Data Flow Based Quality Testing Approach using ACO for Component Based Software Development Neha Prajapati and Naveen Kumar | 807 |
| 150 | 383 | SOA Layers and Layers Safety Definitions Mirsat Yeşiltepe and Ömer Özgür Bozkurt | 813 |
| 151 | 429 | Prediction of Reliability for Service-Oriented Systems Sachin Arora, Lov Kumar and Santanu Ku. Rath | 817 |
| 152 | 501 | A Study of Component Based Software System Metrics Sakshi Patel and Jagdeep Kaur | 824 |
| 153 | 506 | BFA: Bloom filter concurrency controller automation design Niharika Singh, Upasana Lakhina and Ajay Jangra | 829 |
| 154 | 564 | A Cross Platform Mobile Expert System for Agriculture Task Scheduling Sajeeda Shikalgar, Niketa Mamata Bhalerao Kolhe and Saurabh Shubham Pansare Laddha | 835 |
| 155 | 565 | Subjective Evaluation: A Comparison of Several Statistical Techniques Himani Mittal and Syamala Devi M. | N/A |
| 156 | 578 | Risk Analysis of Online Social Networks Horesh Kumar, Shruti Jain andRitesh Srivastava | 846 |
| 157 | 582 | Resource Tracker: A Purposed Remote System Monitoring Methodology Sandeep Kaur | 852 |
| 158 | 613 | A Survey on the Telemedicine in Bangladesh Uzzal Prodhan, Mohammad Rahmanand Israt Jahan | 857 |
| 159 | 677 | Smoke Testing of Web Application Based on ALM Tool Rijwan Khan and Mohd Amjad | 862 |
| 160 | 792 | A Comprehensive Study on State of Scrum Development Shruti Sharma and Nitasha Hasteer | 867 |
| 161 | 799 | Aspect based multi-document summarization Deepak Sahoo, Saibali Saikia, Mridumoni Phukon and Dr Rakesh Chandra Balabantaray | 873 |
| 162 | 844 | Operating Systems: Demand based Modularity Prabhat Kumar, Rohit Raj, Aman Reyaz, Pooshkar Rajiv | 878 |
| 163 | 856 | Test Case Prioritization Techniques for Software Product Line: A Survey Satendra Kumar and Raj Kumar | 884 |
| 164 | 861 | Improved Pseudo-association Rules Technique Sheel Shalini and Kanhaiya Lal | 890 |
| 165 | 870 | Model order reduction of LTI system using Routh stability array method D.K. Sambariya and A.S. Rajawat | 896 |

| 166 | 906 | GPS Based Navigation Design For a Bio Inspired Precision Air Drop System Pradeep Kumar, Sachin Mishra, Brijesh Kumar, Akash Chaudhary, Sunil Chanderia, Narendra Kumar Verma, Jaya Mishra and Brajesh Tripathi | 902 |
|-----|-----|--|-----|
| 167 | 909 | A Software Based Aproach to Acquisition and Analysis of Biosignals using CSAP Meghamala Dutta, Deepneha Duttaand Sourav Dutta | 907 |

INTELLIGENT SYSTEMS & AUTOMATION

| S. No. | Paper ID | Title | Page No. |
|--------|----------|--|----------|
| 168 | 58 | Development of Independent EtherCAT Slave Module and application to Closed Loop Step Motor Drive with Multi-Axis, Do Eon Lee, Quang Vinh Nguyen, Tae-Won Kim, Jun Young Moon, Jae Wook Jeon | 912 |
| 169 | 84 | Load Frequency control of a Renewable Hybrid Power System with Simple Fuzzy Logic controller Swati Rawat, Bhola Jha, Manoj Kumar Panda and Bibhuti Bhusan Rath | 918 |
| 170 | 162 | Application of Elliptic Curve Cryptography in Pretty Good Privacy (PGP) Sanchit Mehrotra and Arun K. Agrawal | 924 |
| 171 | 192 | Performance of Three-Phase Four-Wire Distribution System with DSTATCOM and T-Transformer with Zero Voltage Regulation Manjesh Kumar, Ravi Kumar, Kusum Agarwal, Mukesh Kumar, Dr. Akash Saxena and Dr. B. L. Mathur | 930 |
| 172 | 212 | Efficient soft-switching dc-dc converter for MPPT of a grid connected PV System Ambika Pathy, Gajendra Singh andAshish Srivastava | 934 |
| 173 | 282 | Intelligent Information Retrieval in a Tsunami Detection System Using Wireless Sensor Networks Geetika Malhotra and Deepali Virmani | 939 |
| 174 | 337 | GIS Aided PMU Placement for Dynamic State Measurement in Power Grid: A Case Study Mohd Rihan and Vikash Kumar | 945 |
| 175 | 385 | Multivariate Preprocessing Techniques Towards Optimising Response of Fused Sensor from Electronic Nose and Electronic Tongue Mahuya Bhattacharyya Banerjee, Trisita Nandy Chatterjee, Runu Banerjee Roy, Bipan Tudu, Rajib | 949 |
| 176 | 427 | New Electronically Controllable Grounded to Floating Admittance Convertor without any need of additional passive elements Mayank Srivastava, Swati Joshi, Kavya Goel, Shubhi Srivastava, Dinesh Prasad, Jay Kumar and Girish Parmar | 955 |
| 177 | 443 | Phasor Measurement Unit: Making the Grid Smarterwer Naqui Anwer Anwar Shahzad Siddiqui and Sanjay Bhatnagar | 960 |
| 178 | 465 | Modelling and Control of Wind Solar Hybrid System Using Energy Storage System Mubashar Yaqoob Zargar, Mairaj-Ud-Din Mufti and Shameem Ahmad Lone, Department | 965 |
| 179 | 468 | NAVI : Navigation aid for the visually impaired Tarun Sharma, J H M Apoorva, Manoj Kondapaka, Ramananathan Lakshmanan and Prakruti Gogia | 971 |
| 180 | 482 | Development of control system for a Acid Solution formation Plant Using DCS Gajanan Kolmare, Prasad Bhaseand Amruta Deshpande | 977 |
| 181 | 508 | A 6-Bit 500 MSPS Segmented Current Steering DAC with On-Chip High Precision Current Reference Sachin Khandagale and Santanu Sarkar | 982 |
| 182 | 517 | Optimal design of PIDA controller using Firefly algorithm for AVR power system D. K. Sambariya and D. Paliwal | 987 |
| 183 | 524 | Agricultural Aid for Seed Cultivation: An Agribot Tanupriya Choudhury, Arashdeep Kaur and Utsav Singh Verma | 993 |
| 184 | 605 | Analog-to-Digital Converters: A Comparative Study and Performance Analysis Saima Bashir, Samiya Ali, Suhaib Ahmed and Vipan Kakkar | 999 |
| 185 | 631 | Age Driven Automatic Speech Emotion Recognition System Devika Verma and Debajyoti Mukhopadhyay | 1005 |
| 186 | 710 | A Key Agreement Scheme for Smart Cards Using Biometrics Bhaskar Mondal, Anirban Bhowmick, Tanupriya Choudhuryand Tarni Mandal | 1011 |
| 187 | 714 | Musical Password based Biometric Authentication Ravi Prakash, Suresh Kumar, Chandan kumar, K. K. Mishra | 1016 |

| 188 | 715 | Blind Channel Equalization Using Modified Constant Modulus Algorithm Prakhar Priyadarshi, C.S. Rai | 1020 |
|-----|-----|---|------|
| 189 | 725 | Comparative Simulation of Conventional Maximum Power Point Tracking Methods Amruta Deshpande, S. L. Patil, Harshal Deopare | 1025 |
| 190 | 839 | A Gaussian Shuffled Differential Evolution approach to Economic Load Dispatch Problem with valve point effect Nandan Kumar Navin and Rajneesh Sharma | 1029 |

MULTIMEDIA SERVICES & TECHNOLOGIES

| S. No. | Paper ID | Title | Page No. |
|--------|----------|--|----------|
| 191 | 24 | Digital watermarking: An approach based on Hilbert transform Rashmi Agarwal, M. S.Santhanam and K. Srinivas | 1035 |
| 192 | 54 | A REVIEW TO DETECT LEUKEMIA CANCER IN MEDICAL IMAGES Gurpreet Singh, Gaurav Bathla, SHARANPREET KAUR | 1043 |
| 193 | 134 | A Survey on Different Discrete Wavelet Transforms and Thresholding Techniques for EEG Denoising Mahipal Singh Choudhry, Abhishek, Anuj Gupta, Bhaskar Bharat and Rajiv Kapoor | 1048 |
| 194 | 163 | Removal of Ladder Effects by smoothening the Integer Format Elevation layer via development of a QGIS plugin Munmun Baisantry and Vivek Saxena | 1054 |
| 195 | 184 | Recent Advancement of LBP Techniques : A Survey Sakshi Sharma, Divya Tyagi and Akhilesh Verma | 1059 |
| 196 | 278 | MRI Image Based Patient Specific Computational Model Reconstruction of the Left Ventricle Cavity and Myocardium Disha Bathla, Poonam Sharma, meghna sahay, shagun sood, Ayush Goyal | 1065 |
| 197 | 295 | A Hybrid Approach of Image Steganography Dilpreet Kaur, Harsh Kumar Verma and Ravindra Kumar Singh | 1069 |
| 198 | 309 | DIGITAL IMAGE SECURITY USING MOSAICS Nishigandha V. Gaikwad and Shilpa P. Metkar | 1074 |
| 199 | 327 | An Adaptive Image Fusion Rule For Remote Sensing Images Based on The Particle Swarm Optimization Reham Gharbia, Aboul Ella Hassanien and Ali Hassan El Baz | 1080 |
| 200 | 342 | TURBIDITY DETECTION USING IMAGE PROCESSING Vaibhav Karnawat and Dr. S. L. Patil | 1086 |
| 201 | 349 | A Space based reversible high capacity text steganography scheme using Font type and style Rajeev Kumar, Aruna Malik, Samayveer Singh, Bijendra Kumar and Satish Chand | 1090 |
| 202 | 376 | Cryptanalysis of a Certificateless Aggregate Signature Scheme Pankaj Kumar, Vishnu Sharma and Gaurav Sharma | 1095 |
| 203 | 463 | Off-line Odia Handwritten Numeral Recognition Using Neural Network: A Comparative Analysis Abhisek Sethy and Prashanta kumar Patra | 1099 |
| 204 | 469 | Robust and Imperceptible Color Image Watermarking for Telemedicine Applications Ashutosh Upadhyay and Mayank Dave | 1104 |
| 205 | 474 | Analysis of Secure Watermarking Based on DWT-SVD Technique for Piracy Ankur Shukla and Shishir Kumar | 1110 |
| 206 | 505 | Hybrid Edge Detection Technique for Digital Images Dev Kumar Chaudhary, Roshan Lal , Nirbhay Kashyap andTanupriya Choudhury | 1116 |
| 207 | 507 | Comparative Analysis of Filter Feature Selection Techniques with Different Classifiers for Image Steganalysis Aditi Adlakha and Rita Rana Chhikara | 1122 |
| 208 | 516 | A Novel Approach for Enhancing Image Security and Data Hiding using NVSS Sejal Patel and Jyoti Rao | 1128 |
| 209 | 522 | A new approach of Secret Image Sharing using Verifiable Scheme Priya Venny and Jyoti Rao | 1134 |

| 210 | 664 | Digital Image Watermarking and its optimization using Genetic Algorithm Anshul Kanchan Khanna, Nihar Ranjan Roy and Bhupendra Verma | 1140 |
|-----|-----|--|------|
| 211 | 809 | Strong Threshold Secret Image Sharing Based On Boolean Operation Monu Verma, Rajneesh Rani | 1145 |
| 212 | 823 | Event Summarization in Videos Rajat Aggarwal, Brijesh Singh Butola | 1150 |
| 213 | 868 | Multi-algorithms Based Visual Surveillance System for Human Detection Rishav Garg, Gyanendra K. Verma | 1155 |
| 214 | 871 | Capacitating Surveillance and Situational Awareness with Measure of Visual Engagement using Eyetracker Ram Singh, Sushil Chandra, Kalyani Dhusia, Greeshma Sharma | 1161 |
| 215 | 886 | Understanding the Dynamics of Gautala Autramghat Forest: A Digital Image Classification Approach Yogesh D. Rajendra, Sandip S. Thorat, Ajay D. Nagne, Amol D. Vibhute, Rajesh K. Dhumal, , Amarsinh B. Varpe, S. C. Mehrotra, , K. V. Kale | 1166 |
| 216 | 902 | Image Restoration on Mammography Images Rajesh Kochher, Dr. Anshu Oberoi, Dr. Pallavi Goel | 1170 |
| 217 | 912 | Performance Comparison of Blocking Artifact Reduction of Compressed Image Using Bilateral & Block Wiener Filter Subarna Shakya, Amar Bahadur Gurung, Abinash Basnet | 1174 |

GREEN COMPUTING & INTERNET OF THINGS

| S. No. | Paper ID | Title | Page No. |
|--------|----------|---|----------|
| 218 | 83 | NBST Algorithm: A Load Balancing Algorithm in Cloud Computing Shubham Sidana, Anurag Gupta, Neha Tiwari, Inall Singh Kushwaha | 1178 |
| 219 | 93 | Application of TRIZ Framework for Resolving Security Issues in IOT Pulkit Sharma, Rishabh Rahul Khanna, Vishal Bhatnagar | 1182 |
| 220 | 161 | Privacy Preserving Synonym Based Fuzzy Multi-Keyword Ranked Search over Encrypted Cloud Data Sneha A. Mittal, C. Rama Krishna | 1187 |
| 221 | 181 | Continuous User Identity Verification Using Typing Error Classifications Aswathy Parappuram, Nidhina T R, Greeshma N Gopal | 1194 |
| 222 | 286 | A Framework for Cloud Data Security Ankit Grover, Banpreet Kaur | 1199 |
| 223 | 332 | Performance Analysis of Virtual Machines and Containers in Cloud computing Rabindra K. Barik, Rakesh K. Lenka, K. Rahul Rao and Devam Ghose | 1204 |
| 224 | 399 | Efficient approaches for Intrusion Detection in Cloud Environment Emmanuel S. Pilli, Preeti Mishra, Vijay Varadharajan and Udaya Tupakula | 1211 |
| 225 | 416 | Evaluation of UDP Tunnel for Data Replication in Data Centers and Cloud Environment Irfaan Coonjah, Pierre Clarel Catherine, K. M. S. Soyjaudah | 1217 |
| 226 | 480 | Design & Development of Energy Monitoring Solution Prasad S. Bhase, Gajanan M. Kolmare, A.S. Deshpande | 1222 |
| 227 | 499 | Resource Management New System Architecture Swati Nikam, Digambar Jadhav | 1228 |
| 228 | 552 | Security Enforcement using TRBAC in Cloud Computing Senam Pandey, Akhilesh Dwivedi, Janmejay Pant, Manoj Lohani | 1232 |
| 229 | 615 | A Survey on Elasticity Improvement in Cloud Computing Manish Kumar, Thirunavukkarasu K., Dr. Ajay S. Singh | 1239 |
| 230 | 621 | Application for Assisting Mobility for the Visually Impaired using IoT Infrastructure Siddesh G.M., Manjunath S., Srinivasa K.G. | 1244 |
| 231 | 624 | A Study Report on Virtualization Technique Neha Goel, Anshi Gupta, Shailendra Narayan Singh | 1250 |

| 232 | 643 | Performance Modeling of Skip Models for VM Migration using Xen Minal Patel, Sanjay Chaudhary, Sanjay Garg | 1256 |
|-----|-----|---|------|
| 233 | 647 | Blind Recognition of Parameters of Linear Block Codes from Intercepted Bit stream Anand Sharma, N. Rajesh Pillai | 1262 |
| 234 | 654 | An Intensify Deadline Aware Credit Based Cloud Task Scheduling Pankaj Kumar Chauhan, Payal Jaglan, Poonam Dabas | 1267 |
| 235 | 711 | Greedy Approaches for Deadline Based Task Consolidation in Cloud Computing Dilip Kumar, Dr. Tarni Mandal | 1271 |
| 236 | 768 | A Framework for Detecting Anti-forensics in Cloud Environment Deevi Radha Rani, G. Geetha Kumari | 1277 |
| 237 | 780 | A Survey on Techniques to Achive Energy Efficiency in Cloud Computing Sobinder Singh, Ajay Kumar, Abhishek Swaroop, Anamika | 1281 |
| 238 | 807 | IoT Based Smart Security and Home Automation System Ravi Kishore Kodali, Vishal Jain, Suvadeep Bose and Lakshmi Boppana | 1286 |
| 239 | 821 | Data Isolation in multi-tenant SaaS environment Keshav Gupta, Sandeep Kumar, Ojaswi Agnihotri | 1290 |
| 240 | 832 | IOT based Control of Appliances Ravi Kishore Kodali and SreeRamya Soratkal | 1293 |
| 241 | 884 | Addressing the Characteristics of Mobility Models in IoV for Smart City Nitika Chowdhary, Pankaj Deep Kaur | 1298 |
| 242 | 892 | Achieving Cloud Security using Third Party Auditor, MD5 and Identity-Based Encryption Bhale Pradeepkumar Gajendra, Vinay Kumar Singh, More Sujeet | 1304 |

HARDWARE DESIGN & COMMUNICATION

| S. No. | Paper ID | Title | Page No. |
|--------|----------|--|----------|
| 243 | 22 | Analytical Model for ID-VD characteristics of a Triple Metal Double Gate TFET Navjeet Bagga, Saheli Sarkhel and Subir Kumar Sarkar, Senior Member IEEE | 1310 |
| 244 | 37 | Comparative Analysis of Speed Control Strategies for Vector Controlled PMSM Drive Shoeb Hussain, Mohammad Abid Bazaz | 1314 |
| 245 | 85 | Improved Mirror Image Candidate based Low Computational Complexity Partial Transmit Sequence Technique for PAPR Reduction in OFDM Systems Jyoti Shukla, Rajesh K. Tyagi, Alok Joshi | 1320 |
| 246 | 94 | Modeling Architecture for Telecomm services and Computing the Improvement Attained on Key Performance Indicators Tripty Singh | 1325 |
| 247 | 104 | Influence of Advance Coding Formats over Turbulent Effected FSO Link Vishal Sharma, Heena | 1332 |
| 248 | 109 | Modeling of Radio over Fiber (RoF) system incorporating Multi-carrier Multiplexing Vishal Sharma, Jatinder Kaur | 1338 |
| 249 | 137 | A Novel CPU Scheduling with Variable Time Quantumbased on Mean Difference of Burst Time Sushil Kumar Saroj, Aravendra Kumar Sharma, Sanjeev Kumar | 1342 |
| 250 | 139 | Circuital Analysis of Coaxial Fed Rectangular and U-slot Patch Antenna Ved Prakash, Sunita Kumawat & Priti Singh | 1348 |
| 251 | 160 | Implementation of Low Power Reconfigurable Parametric Equalizer with Row Bypassing Multiplier on FPGA Meenakshi Agarwal, Richa Barsainya, Tarun Kumar Rawat | 1352 |
| 252 | 173 | Low Power Dual Edge Triggered Flip Flop using Multi Threshold CMOS Ashish Kumar and Yogendera Kumar, Deepak Berwal | 1358 |
| 253 | 197 | Performance of Free-Space Optical MIMO System in S-Distributed Turbulence Tanvi Nara, Naman Joshi, Swaran Ahuja | 1362 |

| 254 | 208 | Human Gait Recognition Using Four Directional Variations of Gradient Gait Energy Image Manjunatha Guru V G, Kamalesh V.N., Dinesh R | 1367 |
|-----|-----|---|------|
| 255 | 237 | Development of Volumetric Control and Machine Vision of Antibodies Microdroplet to make Biochips Saurabh Mishra, R. S. Sengar and D. N. Badodkar | 1372 |
| 256 | 276 | A Novel Low Power FGMOS-CCII Based Fully CMOS Four Quadrant Multiplier Neha Varun | 1377 |
| 257 | 303 | Adjacency and Channel Load of Ongoing Calls for Downlink of Multi-Rate MC-DS-CDMA to Locate Vacant Code Vipin Balvan, Raghav Bansal | 1382 |
| 258 | 396 | Reversible Adder Design for Ripple Carry and Carry Look Ahead (4, 8, 16, 32-bit) Neelam Somani, Chitrita Chaudhary, Sharad Yadav | 1387 |
| 259 | 404 | Design and Optimization of Sequential Counters Using a Novel Reversible Gate Rupali Singh, Manoj Kumar Pandey | 1393 |
| 260 | 426 | Reversible Data Hiding Scheme for LZW Codes using Even-odd Embedding Strategy Rajeev Kumar, Aruna Malik, Samayveer Singh, Bijendra Kumar, Satish Chand | 1399 |
| 261 | 448 | Design Anylsis of an E-Shaped Slit Loaded MPA and Parameters Estimation using ANN Gurdeep Singh, Sandeep kaur | 1404 |
| 262 | 450 | Adaptive Edge Discriminated Median Filter to Remove Impulse Noise Ankit Kumar, Aloke Datta | 1409 |
| 263 | 470 | Step by Step Designing of Composite Right Left Handed Leaky Wave Antenna on Substrate Integrated Waveguide using S Slots Nitin Kumar, Rahul Agrawal & S C Gupta | 1414 |
| 264 | 513 | Retiming Technique for Clock Period Minimization using Shortest Path Algorithm Vinita Pandey, Subhash Ch. Yadav, Priya Arora | 1418 |
| 265 | 538 | Routing and Wavelength Assignment in WDM Network using IWD based Algorithm Dinesh Kumar Tyagi, V. K. Chaubey, Parth Khandelwal | 1424 |
| 266 | 541 | Cyclostationary Feature based Detection using Window Method in SIMO Cognitive Radio System Meenakshi Sansoy, Avtar Singh Buttar | 1430 |
| 267 | 548 | Design of 2.4 GHz Differential Low Noise Amplifier Using 0.18 μm CMOS Technology Smrity Ratan, Debalina Mondal, Anima R, Chandan Kumar, Amit Kumar, and Rajib Kar | 1435 |
| 268 | 562 | Implementation of an Efficient Multiplier Using the Vedic Multiplication Algorithm Paras Gulati, Harsh Yadav and Manoj KumarTaleja | 1440 |
| 269 | 569 | Design, Simulation and Analysis of Energy Efficient 1-Bit Full Adder at 90nm CMOS Technology for Deep Submicron Levels Rohan Jain, Prateek Singh, Anmol Sharma, Rajiv Sharma | 1444 |
| 270 | 570 | Fabrication and Characterization of a Carbon Nanotube based Junctionless Ion Sensitive Field Effect Transistor (CNT-JLISFET) Purnima Kumari Sharma, Hiranya Ranjan Thakur, Jiten Chandra Dutta | 1450 |
| 271 | 591 | RTL Implementation and Analysis of Fixed Priority, Round Robin, and Matrix Arbiters for the NoC's Routers Rajeev Kamal, Juan M. Moreno Arostegui | 1454 |
| 272 | 611 | Wavelet based OFDM System over Flat Fading Channel using NLMS Equalization Sunita Sirvi, Lokesh Tharani | 1460 |
| 273 | 618 | Qualification of Tied-off Signals inSoC VerificationUsing Mutation Analysis Prokash Ghosh | 1464 |
| 274 | 626 | Computation of Vibrational Frequency on Trapezoidal Plate with Non Homogeneity Effect Amit Sharma, Vijay Kumar, Ashish Kumar Sharma, A.K. Raghav | 1470 |
| 275 | 628 | Low Power and Noise Resistant 16X16 SRAM Array Design using CMOS Logic and Differential Sense Amplifier Rashmi Bisht, Priyanka Aggarwal, Pooja Karki, Peyush Pande | 1474 |
| 276 | 632 | Enhanced Bandwidth High Gain Micro-Strip Patch Feed Dielectric Resonator Antenna Gaurav Varshney, Pankaj Mittal, V. S. Pandey, R. S. Yaduvanshi and Swarna Pundir | 1479 |
| 277 | 637 | Multilayer Coatings with Slotted MDM Surface Plasmon Waveguide for the Improvement of Sensitivity and Transmission with High Refractive Index Material Shivali Rajora, Sachin Kumar Rajput | 1484 |
| 278 | 642 | Implementation of WiMAX for Traffic Management through Ambient Sensing Piyush Yadav, Bhupendra singh, Richa Singh | 1488 |
| 279 | 646 | Ultra Wide Band Low Noise Amplifier with self-bias for improved gain and reduced power dissipation Vivek Singh, Munish Rattan | 1494 |
| 280 | 688 | Performance Analysis of Different Novel Organic Thin Film Transistor Structures 168 Aanchal Verma and Poornima Mittal | 1499 |

| 281 | 690 | Performance Comparison of Monolayer, Bilayer and Multilayer Organic Light Emitting Diodes Akanksha Uniyal, Srishti and Poornima Mittal | 1505 |
|-----|-----|---|------|
| 282 | 693 | A fully grouped routing for Homogeneous FAT Tree Network – On – Chip Topology Abhijit Biswas, Md. Anwar Hussain | 1510 |
| 283 | 694 | Performance Analysis of Vertical Channel Organic Thin Film Transistors using Various OSC Materials Srishti, A. K. Baliga, Yamini Pandey and Brijesh Kumar | 1515 |
| 284 | 699 | Performance Analysis of Dual Gate-OTFT with Variation in OSC Thickness and Channel Length Yamini Pandey, A. K. Baliga, Srishti, Shubham Negi and Brij | 1521 |
| 285 | 700 | Analysis of Bottom Gate Bottom Contact Device using Floating Electrode Structure Arun Pratap Singh Rathod, A. K. Baliga and Brijesh Kumar | 1527 |
| 286 | 701 | Performance Analysis of Dual Gate Organic Thin Film Transistor through Analytical Modeling Shubham Negi, A. K. Baliga, Yamini Pandey, Poornima Mittal and Brijesh Kumar | 1533 |
| 287 | 703 | Recent Advancements and Overview of Organic Solar Cell Kamlesh Kukreti, Arun Pratap Singh Rathod and Brijesh Kumar | 1539 |
| 288 | 731 | Analysis of Modulation and Coding Scheme for 5th Generation Wireless Communication System Ahmed Al Amin, Devashish Basak, Tania Khadem, Md. Delwar Hossen, Md. Shoriful Islam | 1545 |
| 289 | 752 | Performance Evaluation ofROF Communication Link using DSB and SSB Modulated Signals Compensated with Parallel Modulation Scheme Saurabh Prakash, Richa Bhatia, Ekta Saini | 1550 |
| 290 | 758 | Suitable Beamforming Technique for 5G Wireless Communications Md. Shoriful Islam, Tazkia Jessy, Md. Sabuj Hassan, Kartick Mondal, Tosikur Rahman | 1554 |
| 291 | 759 | Application of MIMO system for Telemetry, Tracking Command and Monitoring Subsystem to Control the Satellite Praval kumar Udaniya, Gopesh Sharma, Lokesh Tharani | 1560 |
| 292 | 793 | A Novel Multiband Psi () Slotted Fractal Antenna for S-Band Applications Gagandeep Kaur, Chahat Jain, and Munish Rattan | 1563 |
| 293 | 797 | Finite State Machine based Arbiter for on chip Communication Architecture Ruqaiya Khanam, Ziauddin Ahmad | 1568 |
| 294 | 804 | TV White Spectrum for Wireless Broadband Internet Connectivity (WBIC) Md. Shoriful Islam, Kartick Mondal, Md. Salim Zahan, Tania Khadem, Ahmed Al Amin | 1573 |
| 295 | 806 | Performance Analysis of Massive MIMO for 5G Wireless Communication Systems Md. Shoriful Islam, Md. Kamruzzaman, TazkiaJessy, Md. Salim Zahan, Md. Sabuj Hassan | 1579 |
| 296 | 811 | Spectrum Aggregation in Cognitive Radio Network Pooja Garg and Dr. R M Sharma | 1584 |
| 297 | 817 | Efficient Spectrum Utilization for Femtocell Using Cooperative Game Asmita Roy, Sadip Midya, Priti Deb, Debashis De, Koushik Majumder | 1588 |
| 298 | 840 | Numerical Analysis of Propagation in Finite Length 2D Photonic Crystal Fiber Using Transmission Line Method M.H. Waghmare, K.T.V. Reddy | 1594 |
| 299 | 842 | FPGA Based Design of Area Efficient Router Architecture for Network on Chip (NoC) Mayank Kumar, Kishore Kumar, Sanjiv Kumar Gupta and Yogendera Kumar | 1600 |
| 300 | 848 | TARAS: A Topology Agnostic Routing Algorithm Using Segmentation Strategy for 3D NoC Priyanka Mitra | 1606 |
| 301 | 863 | Enhanced Slew Rate, Constant-gm Rail-to-Rail OpAmp using 1:2 Current Mirror Biasing Technique Avaneesh K. Dubey, R. K. Nagaria, Pratosh K. Pal, Rakesh K. Singh | 1612 |
| 302 | 887 | Miniaturized Dual-Band BPF Using HairpinLoaded Interdigital Structure Arvind Kumar Pandey, R. K. Chauhan | 1618 |
| | | · | |