2017 International Conference on Networks & Advances in Computational Technologies (NetACT 2017)

Thiruvanthapuram, India 20-22 July 2017



IEEE Catalog Number: ISBN: CFP17L41-POD 978-1-5090-6591-2

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: | CFP17L41-POD |
|-------------------------|-------------------|
| ISBN (Print-On-Demand): | 978-1-5090-6591-2 |
| ISBN (Online): | 978-1-5090-6590-5 |

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



Proceedings of the 2017 International Conference on Networks & Advances in Computational Technologies (NetACT)

| Sl No. | Paper ID | Title & Authors | Page No. |
|-----------|-------------|---|----------|
| 1. | 4 | Facial Expression Recognition and Emotion Classification System for Sentiment Analysis <i>Jayalekshmi J and Tessy Mathew</i> | 1 - 8 |
| 2. | 5 | An Efficient Image Categorization Approach Using Deep Belief Network <i>Sneha Skaria, Tessy Mathew and Anjali C</i> | 9 - 14 |
| 3. | 9 | Spectrum Sensing of SC-FDMA Signals in Cognitive Radio Networks <i>Stephanie Cherian and Shiras S.N.</i> | 15 - 18 |
| 4. | 24 | Two-level Text Summarization from Online News Sources with Sentiment Analysis <i>Tarun B. Mirani and Sreela Sasi</i> | 19 - 24 |
| 5. | 26 | Server-based Dynamic Load Balancing Wilson Prakash and P Deepalakshmi | 25 - 28 |
| 6. | 32 | Image Watermarking Based on Cuckoo Search with DWT Using Lévy Flight Algorithms Kumar Aditya, Akash Choudhary, Amrit Raj, Mihir Sing, Ananya Adhikari | 29 - 33 |
| 7. | 34 | A Statistical Survey on VM Scheduling in Cloud Workstation for Reducing Energy Consumption by Balancing Load in Cloud Hima Bindu G B and Janet J | 34 - 43 |
| 8. | 42 | An Industrial Survey on the Influence of Process and Product Attributes on Software Product Reliability <i>Sanjay Joshi, Bharat Deshpande and Sasikumar Punnekkat</i> | 44 - 51 |
| 9. | 44 | Track & Go app - A Location Prediction Web Application Alisha M Baji, Salini M, Sandra S, Sreya R Thomas, Aswathy Ravikumar | 52 - 55 |
| 10. | 46 | Recent Trends on Post-silicon Validation and Debug: An Overview <i>Agalya R and Saravanan S</i> | 56 - 63 |
| 11. | 47 | Operational Amplifier Circuit Sizing Based on NSGA-II and Particle Swarm Optimization <i>Sasikumar A and Muthaiah R</i> | 64 - 68 |
| 12. | 48 | Analyzing various Topic Modeling Approaches for Domain- Specific Language Model <i>Disha Kaur Phull and G. Bharadwaja Kumar</i> | 69 - 73 |

Table of Contents

| 13. | 49 | Calculations of Signal Length Mismatch and Trace Length for Printed Circuit Board [PCB] Design Jagan Mohan and Muthaiah Rajappa | 74 - 79 |
|-----|----|---|-----------|
| 14. | 50 | Design and Development of 32 channel Receiver Beam Former <i>Ananth Hari Ramakrishnan, Muthaiah Rajappa, Jayaraj U.Kidav,</i> <i>Nageswara Rao C.H and Sivamangai N.M</i> | 80 - 85 |
| 15. | 51 | Optimized Low Power Full Adder Design <i>Thenmozhi Veerasamy and Muthaiah Rajappa</i> | 86 - 89 |
| 16. | 52 | A Low Power Vernier Time-To-Digital Converter using Adiabatic Logic Mahima Ravichandran and Muralidharan D | 90 - 94 |
| 17. | 53 | Pipelined Chipper based NOC for Performance Enhancement Sivaranjani Ulaganathan, Muralidharan D and Muthaiah R | 95 - 98 |
| 18. | 54 | Insertion of Hardware Trojans into a Pipelined and Non- Pipelined AES to achieve High Throughput and Security Level <i>Elavarasi Velmurugan and Saravanan S</i> | N/A |
| 19. | 56 | Design and Analysis of Determinstic-NAP (DNAP) and Hash Cache Architecture <i>Jerline Johnson Robert and Vijay Sai R</i> | N/A |
| 20. | 57 | FPGA-ARM Implementation of an Intelligent Mobile Ad-Hoc Network <i>Arun Kumar K A</i> | 111 - 115 |
| 21. | 58 | FPGA Implementation of Spectrum Sensing Engine for Cognitive Radios <i>Arun Kumar K A</i> | 116 - 119 |
| 22. | 61 | BBC: Behavior Based Clustering for Energy Preservation in Wireless Sensor Networks <i>Yogapriya M and Kavitha T</i> | N/A |
| 23. | 63 | Optimized Watermarking Technique using PCA-DWT and LOG Filter M Rajasekhar Reddy, P Sai Sandeep, Ch Mounika, J Gopi and S.D Suganya | 126 - 130 |
| 24. | 64 | A Modified Cryptographic Approach For Securing Distributed Data Storage In Cloud Computing M Rajasekhar Reddy, R Akilandeswari, S Priyadarshini, B Karthikeyan and E Ponmani | 131 - 139 |
| 25. | 66 | A decision making framework under intuitionistic fuzzy environment for solving cloud vendor selection problem Krishankumar R, Arvinda S R, Amrutha A, Premaladha J and Ravichandran K.S. | 140 - 144 |
| 26. | 68 | A New Hybrid Approach Using FOA and ELM Kiruthigha Kalidoss and Ravichandran K.S. | N/A |
| 27. | 69 | An Efficient Dehazing Algorithm For Enhancement of Haze Color images E Sasireka and K.S Ravichandran | N/A |

| 28. | 70 | Forest Fire Prediction And Forecasting Using Meteorological Data <i>Stella Infanta and Santhi B</i> | N/A |
|-----|-----|---|-----------|
| 29. | 72 | Dynamic Load Balancing in Cloud- A Data-Centric Approach Rayan Dasoriya, Purvi Kotadiya, Priyanshu Nayak, Garima Arya and Kamal Mistry | 162 - 166 |
| 30. | 75 | An Efficient Feature Selection using Parallel Cuckoo Search and Naïve Bayes classifier T. Sai Sujana, N. Madhu Sudana Rao, Raja Sekar Reddy | 167 - 172 |
| 31. | 81 | An Efficient Routing Protocol with Filtering Approach for Delay Tolerant Networks Jinkal Patel, Prachi Patel and Mala Mehta | N/A |
| 32. | 84 | Biomedical Image Integrity Check for Telemedicine Applications by Hash Embedding and Wavelet Compression <i>Mina K. Baby, Aswathy Madhu and Aneesh R. P.</i> | 178 - 185 |
| 33. | 85 | On-Building Announcement System using Bluetooth Trisha Ghosh and Sneha Tiwari | 186 - 191 |
| 34. | 86 | A Novel Data Storage Solution For Cloud Bhagya S.L. and Prof. Raju K. Gopal | 192 - 195 |
| 35. | 87 | A Novel Method Based on Fuzzy Logic to set the Arbitration Threshold in WirArb for Time Critical Applications in Wireless Sensor Network Reshma Mariam Jacob and Sravan M S | 196 - 202 |
| 36. | 88 | Smart will - Converting the legal testament into a smart contract <i>Sreehari P, M Nandakishore, Goutham Krishna, Joshin Jacob and</i> <i>Shibu V S</i> | 203 - 207 |
| 37. | 89 | Prediction with Partitioning: Big Data Analytics Using Regression Techniques <i>Saritha K and Sajimon Abraham</i> | 208 - 214 |
| 38. | 90 | Instructional Design for Learning Path Identification in an E- learning Environment using Felder-Silverman Learning Styles model <i>Lumy Joseph and Sajimon Abraham</i> | 215 - 220 |
| 39. | 94 | Secured and Reliable File Sharing System with Deduplication using Erasure Correction Code Chippy Jacob and Rekha V R | 221 - 228 |
| 40. | 95 | Privacy Preserved approach for Trajectory anonymization through Zone creation for halting points <i>Rajesh N and Sajimon Abraham</i> | 229 - 234 |
| 41. | 99 | Analytic thinking of Patients' viewpoints pertain to SPA Treatment Deepa Mary Mathews and Sajimon Abraham | 235 - 241 |
| 42. | 103 | Super Secure Door Lock System For Critical Zones <i>Meera Mathew and Divya R S</i> | 242 - 245 |

| 43. | 104 | Detection and Segmentation of Mitotic Cell Nuclei in Breast Histopathology Images <i>Rintu Maria Thomas and Jisha John</i> | 246 - 250 |
|-----|-----|---|-----------|
| 44. | 105 | Network approach for Stock market data mining and portfolio analysis Susan George and Manoj Changat | 251 - 256 |
| 45. | 106 | Semantic Trajectory Analysis for identifying locations of interest of moving objects Nishad A and Sajimon Abraham | 257 - 261 |
| 46. | 119 | Intra-Tenant resource sharing in YARN based on Weighted Arithmetic Mean <i>Kiran Kumar, Dr. D Venkata Subramanian and T.Bhavani</i> | 262 - 265 |
| 47. | 127 | Exploring the Merits of NoSQL : A Study Based on MongoDB Benymol Jose and Sajimon Abraham | 266 - 271 |
| 48. | 137 | ETSI: Efficient Task Scheduling in Internet of Things (IoT) Balamurugan G, Baranidharan B and Madhusudana Rao Nalluri | N/A |
| 49. | 140 | Brain Computer Interface: Design and Development of a Smart Robotic Gripper for a Prosthesis Environment <i>Prathibha R, Swetha L and Dr Shobha K R</i> | 278 - 283 |
| 50. | 148 | Clustering And Classification of Large Data using LSC and RC-KNN Algorithm <i>Preethi S and P.L.K Priyadarshini</i> | N/A |
| 51. | 150 | Analysis of Application of Arithmetic coding on DCT and DCT-DWT Hybrid Transforms of Images for Compression <i>Thafseela Koya, Saravanan Chandran and Vijayalakshmi K</i> | 288 - 293 |
| 52. | 154 | A Novel Segmentation Algorithm for Hyperspectral Cancer Images <i>Arun Gopi, Reshmi C S and Aneesh R P</i> | 294 - 299 |
| 53. | 158 | QoS Enhancement of AOMDV by Priority-Energy- Bandwidth Aware Mechanism Lakshmi Mohandas and Shijin Knox G.U | N/A |
| 54. | 159 | Fast And Efficient Compact Feature Descriptor For Face Recognition <i>Leona Thomas Kutty and Lakshmy S</i> | 305 - 309 |
| 55. | 160 | Signature-based threshold PAKE protocol Shafnamol N and Simi Krishna K.R | 310 - 313 |
| 56. | 161 | An Emulation of SQL Injection Disclosure and Deterrence Sai Lekshmi A S and Devipriya V S | 314 - 316 |
| 57. | 165 | Design of LFSR (LINEAR FEEDBACK SHIFT REGISTER) for Low Power Test Pattern Generator <i>Saraswathi Rajagopal and Manikandan Ramachandran</i> | 317 - 322 |
| 58. | 166 | Structured Data Extraction from Emails Ashraf Q. Mahlawi and Sreela Sasi | 323 - 328 |
| 59. | 167 | Movie Review Summarization and Sentiment Analysis using RapidMiner Alaa F. Alsaqer and Sreela Sasi | 329 - 335 |

| 60. | 169 | Design of Area and Power Efficient Full Adder in 180nm Himabindu Kalicherla and Hariharan Kalyanaraman | 336 - 340 |
|-----|-----|--|-----------|
| 61. | 170 | Synthesis of Low-Power AreaEfficient MultiplierArchitecture for FIR FilterS.Sathiya priya and K.Hariharan | N/A |
| 62. | 175 | A Novel Segmentation Based Copy-Move Forgery Detection In Digital Images Resmi M R and Vishnukumar S | 346 - 350 |
| 63. | 176 | Data Secrecy using 3C with Mobile Application and Packet Encryption <i>Harshika Rana and Vishal Dahiya</i> | 351 - 354 |
| 64. | 177 | High Precision Arithmetic Unit for Bio-Medical and Radar System Applications Kazi Nikhat Parvin, Mohammed Zakir Hussain and Md. Ali Ghazi Islam | 355 - 358 |
| 65. | 179 | Detecting Specific Learning Disabilities Akhil R ,Athul Soori ,Dilip Shankar ,Mrinal Krishnan M ,B R Poorna | 359 - 363 |
| 66. | 181 | Gold Price Estimation Using a Multi Variable Model K.R Sekar Manav Srinivasan K.S.Ravichandran J.Sethuraman | 364 - 369 |
| 67. | 182 | Concurrent Classifier Based Analysis for Climate Prediction Using Service Oriented Architecture <i>Sekar K R, J.Sethuraman Manav Srinivasan K.S. Ravichandran</i> <i>R.Manikandan</i> | 370 - 375 |
| 68. | 183 | Performance Evaluation of Viewpoint Covariant Keypoint Detection in RGBD Images <i>Athira Asokan and M J Josemartin</i> | 376 - 381 |
| 69. | 184 | Application Of Image Intensity Local Variance Measure For Analysis Of Distorted Images <i>Aparna R and M J Josemartin</i> | 382 - 386 |
| 70. | 185 | A Novel Method For Evaluation of Visual Security of Images Aansu Sara Abraham, Lekha R Nair and Deepa M S | 387 - 391 |
| 71. | 188 | Throat Microphone Speech Recognition using MFCC <i>Amritha Vijayan, Riyanka Raji Johnson, Bipil Mary Mathai, Karthik</i> <i>Valsalan and Lani Rachel Mathew</i> | 392 - 395 |
| 72. | 189 | SMART WORKPLACE - Using iBeacon Sruthi Menon, Anu George, Nehal Mathew, Vishnu Vivek and Jisha John | 396 - 400 |
| 73. | 191 | A study on data correlation for interferometric observations like VLBI and Delta-DOR applications and the correlation analysis of XF Correlator. <i>Arathi S Nair and Salim Paul</i> | 401 - 406 |
| 74. | 192 | An Efficient Feature Selection using Artificial Fish Swarm Optimization and SVM classifier Madhu Sudana Rao Nalluri, Sai Sujana T, Harshini K and Swaminathan V | 407 - 411 |
| 75. | 195 | A Review on domain adaptive video summarization algorithm <i>Aiswarya N R and Smitha P S</i> | 412 - 415 |

| 76. | 196 | An Enhanced hybrid Data Security Algorithm for Cloud <i>Vikas K.Soman and Natarajan V</i> | 416 - 419 |
|-----|-----|--|-----------|
| 77. | 199 | Optimal Component Selection for Rich Internet Applications in Web Engineering <i>Sekar K R and J.Sethuraman</i> | 420 - 425 |
| 78. | 202 | Synergy – An Energy Optimization technique Namitha Vimal, Abhijith V, Binoy J, Anju Parvathy L B and Anjali C | 426 - 431 |
| 79. | 203 | Cluster graph based model for extracting and searching algorithm in Bigdata Veena G and Jyothis Joseph | 432 - 437 |
| 80. | 205 | Significance of TEO Slope Feature in Speech Emotion Recognition <i>Drisya P S and Rajeev Rajan</i> | 438 - 441 |
| 81. | 207 | Performance evaluation of DWT based Speech Enhancement Haripriya R.P., Lani Rachel Mathew and K. Gopakumar | 442 - 446 |
| 82. | 209 | Measurement Error Compensation using Metacognitive ELM based Artificial Neural Network <i>Vishnu Priya R, Vinitha Ramdas, Sethunadh.R and Kumar G S</i> | 447- 452 |
| 83. | 211 | Implementation of 24 Bit High Speed Floating Point Vedic Multiplier <i>Athira Menon M S and Renjith R J</i> | 453 - 457 |
| 84. | 215 | PNCC Based Speech Enhancement and Its Performance Evaluation using SNR loss <i>Betty Kurian, Shanavaz K T and Nikhil G Kurup</i> | 458 - 461 |
| 85. | 220 | Encryption and decryption of text file and audio using LabVIEW <i>Sruthi S, Athira Vijay, Shejo Jose and Athira V</i> | 462 - 466 |
| 86. | 227 | Prediction of Defect Susceptibility in Object Oriented Software <i>Greeshma Pradeep Kartha, Anjali C, Dr. R Vikraman Nair and Dr.</i> <i>Venkateswari S</i> | 467 - 472 |
| 87. | 232 | THE GOLDEN AID - An Emergency Ambulance System <i>Arun Krishna, Anita Acha George, Toney Dias, Asheena Sara Varghese</i> <i>and Divya R S</i> | 473 - 476 |