2016 International Conference on Computing Communication Control and Automation (ICCUBEA 2016)

Pune, India
12-13 August 2016

IEEE Catalog Number: CFP16ZBC-POD
ISBN: 978-1-5090-3292-1

Copyright © 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 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: CFP16ZBC-POD
ISBN (Print-On-Demand): 978-1-5090-3292-1
ISBN (Online): 978-1-5090-3291-4

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

Second International Conference on Computing Communication Control and Automation

ICCUBEA 2016

Table of Contents

Preface
Our Inspiration
Message from the Chairman
Message from Principal
Message from General Chairs
Patrons
Organizing Committee
Advisory Committee
Technical Program Committee
Acknowledgement

Track 1 - High Performance Computing

Sr.No	Paper Title
1.	Managed Transparent Email Security From Cloud N/A
2.	Biometric Authentication Using Software As A Service (Saas) 1
3.	Parallel Communication Library For TCP Stack 7
4.	Cross Platform C Compiler 12
5.	Data Parallelism For Distributed Streaming Applications 16
6.	Real-Time Processing Of Iot Events Using A Software As A Service (Saas) Architecture With Graph Database 20
7.	Division And Replication For Data With Public Auditing Scheme For Cloud Storage 26
8.	Secure Access Control Using Attribute Based Encryption For Cloud Data N/A
9.	Priority Based Task Scheduling By Mapping Conflict-Free Resources And Optimized Workload Utilization In Cloud Computing. 31
10.	Prediction Of Chemical Bond Formation Using Efficient CUDA Based HPC Framework 37
11.	Router Architecture For Interconnection Network: A Review 42
12.	Improving Data Storage Security In Cloud Environment Using Public Auditing And Threshold Cryptography Scheme 48
13.	GPU Accelerated Chemical Text Mining For Relationship Identification Between Chemical Entities In Heterogeneous Environment 54
14.	Torus Network Labeling In High Performance Computing 60
15.	The Survey On Approaches To Efficient Clustering And Classification Analysis Of Big Data 64
16.	Monitoring Of Transformer Parameters Using Internet Of Things In Smart Grid 68
17.	Ixml-Generation Of Efficient XML Parser For Embedded System 72
18.	Retrieval And Extraction Of Unique Patterns From Compressed Text Data Using The SVD Technique On Hadoop Apache Mahout Framework 77

19. Optimal Networks Selection Algorithm In Heterogeneous Wireless Networks N/A
20. A Basic Model For Profiling Power Consumption In HPC Sub-Systems 82
21. GPS Based Service Provider Server For Various Classified Domain Specific Information To The End Users At Distributed Locations With Consistency 87

Track 2 : Databases

22. Design Of A Weighted Meta Classifier For Imbalance Data Having Heterogeneous Features 93
23. Identification Of Key Opinion Leaders In Healthcare Domain Using Weighted Social Network Analysis 99
24. Diagnosis Of Diabetes Using Fuzzy Inference System 105
25. Personalized Mobile Search With Query Pattern And Location Pattern 111
26. Analysis Of Web Application Security Mechanism And Attack Detection Using Vulnerability Injection Technique 117
27. ANNOTATIONS ON DOCUMENTS FOR INFORMATION RETRIEVAL 123
28. Implementation Of An Efficient Web Crawler To Search Medicinal Plants And Relevant Diseases 129
29. Lung Cancer Detection Using Genetic Approach 133
30. An Efficient Framework For Recommendation Of Hindustani Art Music 138
31. Enhancing Performance Of Keyword Query Over Structured Data 143
32. Recommendation System For Yoga And Raga For Personalized Health Based On Constitution 149
33. Ensuring Static Data Integrity On OODB Transaction 154
34. Developing Hedging Strategies In Option Segment 160

Track 3 : Intelligent Systems & Machine Learning

35. Improved Stock Prediction Accuracy Using EMA Technique N/A
36. Analysing Human Feelings By Affective Computing – Survey 198
37. Enhanced Prediction Correctness Of Smartphone Dictionary Via Addition Of Application Awareness 242
38. Autorec: Intelligent Agent For Rapid Recommendation To Engender Or Sustain Blog-Based Virtual Community 165
39. Future Weather Prediction Using Genetic Algorithm And FFT For Smart Farming 169
40. Extending Hybrid Conditional Random Fields Approach Of Named Entity Recognition For Marathi Tweets 175
41. Intelligent Tutoring System For Database Normalization 180
42. Multiobjective Advanced Planning And Scheduling Using Iterative Genetic Algorithm 186
43. Negation Handling For Sentiment Classification 192
44. Mood Based E-Learning Using EEG 204
45. Intelligent Tutoring Systems For Learning English Punctuation 208
46. PS Redesign For Smartphone-Using Older Adults 214
47. Role Of Gender Influence In Vocal Hindi Conversations: A Study On Speech Emotion Recognition 218
48. K-NN DATA CLASSIFICATION TECHNIQUE USING SEMANTIC SEARCH ON ENCRYPTED RELATIONAL DATA BASE 224
49. Game Theoretic Optimization Of Spectrum Allocation In Cognitive Radio 230
50. An Overview Of Text Summarization Techniques 235
51. Diet Recommendation Based On Prakriti And Season Using Fuzzy Ontology And Type-2 Fuzzy Logic 246
52. Healing Hands For Depressed People (D-HH) Through Analysis Of Human Body Signals To Predict The Level Of Depression And Recommendation Of Suitable Remedy. 253

53. Framework For Searching Research Papers In Dataset Using Soft Computing Approach 259
54. Dynamic Document Representation Using Auto Summarization N/A

55. Coordination Control Of DFIG Under Distorted Grid Voltage Conditions Using MATLAB Simulink 264
56. IMPROVED ARTIFICIAL NEURAL NETWORK FOR DIMENTION REDUCTION IN MEDICAL DATA CLASSIFICATION 270
57. ANALYZING ASSOCIATIVITY AMONG MIRROR NEURONS FOR FINANCIAL PROFILING: A PROPOSAL 276
58. Online Energy Audit And Renewable Energy Management System 280
59. Trustworthiness Evaluation System In E-Commerce Context 286
60. VERY FAST DECISION TREE (VFDT) ALGORITHM ON HADOOP 292
61. E-Learning System Using Augmented Reality 298
62. A Review Of Machine Learning Techniques Using Decision Tree And Support Vector Machine 303
63. A Survey On Reducing Encoder Complexity In HEVC Standard N/A
64. Pattern Classification Using Modified Enhanced Fuzzy Min-Max Neural Network 310

Track 4 : Image Processing & Computer Vision

65. Recent Machine Learning Based Approaches For Disease Detection And Classification Of Agricultural Products 315
66. Detection Of Landing Areas For Unmanned Aerial Vehicles 321
67. Image Cartoonization Methods 326
68. I-Surveillance : Intelligent Surveillance System Using Background Subtraction Technique 333
69. Implementation Of Barrel Distortion Correction On DSP In Real Time 338
70. Pick And Place Industrial Robot Controller With Computer Vision 344
71. Wavelet Based Selection For Fusion Of Medical Images 348
72. FPGA Based Disparity Estimation For Stereo Vision System 354
73. A New Algorithm For CBIR Using Bi-Cubic Interpolation With Color Coding And Different Level Of DWT 359
74. A Novel Approach For Digital Image Watermarking Using 5-DWT-SVD And Stream Cipher Encryption With Different Attacks 365
75. Efficient Face And Facial Expression Recognition Model 372
76. Facial Emotion Recognition Using Log Gabor Filter And PCA 380
77. Digital Video Watermarking Using Hybrid Wavelet Transform With Cosine, Haar, Kekre, Walsh, Slant And Sine Transforms 385
78. Time Efficiency Comparison Of Wavelet And Inverse Wavelet Transform On Different Platforms 390
79. Bilingual Sign Recognition Using Image Based Hand Gesture Technique For Hearing And Speech Impaired People 395
80. Edge Preserving Smoothing And Enhancement For Electronic Portal Images 401
81. Content Based Image Retrieval Using Joint Descriptors 405

Track 5 : Computer & Communication Security

82. Malware Detection In Android Application By Rigorous Analysis Of Decompiled Source Code 457
83. Trivial Content Gain Control And Reliability Certification For NDN With GKM 409
84. Online Fraud Transaction Prevention System Using Extended Visual Cryptography And QR Code 414
85. E-Voting System Using Visual Cryptography & Secure Multi-Party Computation 418
86. Secure Authentication For Online Voting System 422
87. A Robust And Verifiable Threshold Multi-Authority Access Control System In Public Cloud Storage 426
88. Secure And Reliable Transmission Of Chemical Molecule Structure Using QR Code And Secret Sharing 430
89. Framework For Security Of Shared Data In Cloud Environment 435
90. A RESEARCH ANALYSIS OF HUMAN MINDSET BASED ON SIGNIFICANT PARAMETERS 441
91. Data Integrity Verification Privacy Preserving Approach Of Cloud Using Third Party Auditor And Multithreading 449

92. Detection Of SQL Injection And XSS Attacks In Three Tier Web Applications 453
93. Security Of Remote Voting System Based On Visual Cryptography And SHA 463
94. Information Retrieval For Marathi And English Language Using Cross Temporal Information Retrieval Algorithm 469
95. Securing Broker-Less Publisher/Subscriber Systems Using Cryptographic Technique 473
96. Decrypting Homomorphism 479
97. Trust And Neighbor Coverage Based Protocol To Improve Reliability Of Routing In MANET 485

Track 6 : Computer Networks

98. Wireless Sensor Network Using Xbee On Arduino Platform An Experimental Study 490
99. Improved EAACK: Develop Secure Intrusion Detection System For Manets Using Hybrid Cryptography 495
100. Avoiding The Data Leakage And Providing Privacy To Data In Networking 499
101. Deduplication In Cloud Storage On The Basis Of Proof Of Ownership 503
102. Gray Hole Attack Detection Using False Reply Count And Truelink Based Path Authentication In MANET 508
103. Use Of ECC To Address Key Escrow And Attribute Revocation Problem 513

Track 7 : Digital Communication

104. Design Of A Coplanar Microstrip Antenna For GPS/Bluetooth Applications 519
105. Performance Of MMSE Channel Equalization For MIMO OFDM System 523
106. Ergodic Capacity Based Transmit Antenna Selection For Cogniitve Radio Network Under Nakagami-M Fading 526
107. Broadband Slot Cut S-Shaped Microstrip Antenna 532
108. Dual-Band Dual Polarized D-Shaped Microstrip Antenna 537
109. Sequentially Rotated Gap-Coupled Angular Slot Cut Circular Microstrip Antenna Arrays 543
110. Ultra-Wideband Compact Ring Sector Printed Monopole Antenna 549
111. Low Profile Hexagonal Ring Patch Antenna For Biomedical Application 555
112. Analysis Of Stepped Half U-Slot Cut Shorted Smsas 559
113. Broadband E-Shaped Space-Fed Array With Stacked E-Shaped Microstrip Antenna Array Feed 564

Track 8 : Signal Processing & Applications

114. A New Approach For Classification Of Power Quality Events Using S-Transform N/A
115. Power Switch Fault Signature Detection In Full Bridge DC/DC Converter For A Photovoltaic Application N/A
116. Study Of X265 And Genetic Motion Search Algorithm 569
117. Design And Implementation Of Low Power Compact Amplifier Circuitry For Wearable Biosignal Device 574
118. Efficient Design And Implementation Of Multiplierless FIR Filter 580
119. Speech Enhancement Based On Proficient Adaptive Filtering Algorithm N/A
120. Development Of On Board Diagnostics (OBD) Testing Tool To Scan Emission Control System 585
121. Development Of Speech Recognition Technique For Marathi Numerals Using MFCC & LFZI Algorithm 589
122. Speech Signal Analysis And Enhancement Based On HNM Synthesis 595
123. Automatic Speech Recogntion Of Isolated Words In Hindi Language 599
124. Classification Of Faults In Power System Using Signal Processing Approach 605
125. Epileptic Seizure Detection Using Ensemble Classifier And HOS (Higher Order Statistics) 610
126. Comparative Study And Implementation Of Conventional And Adaptive Method Of Moments Estimation For Wind Profiler Radar 617

127. Automatic Speech Recognition Models: A Characteristic And Performance Review 622
128. Multichannel Detection Of Epilepsy Using SVM Classifier On EEG Signal 629
129. CPW Feed Electromagnetic Y Shaped Feeding Technique For Circular Polarization & Bandwidth Enhancement 635
130. Circularly Polarized Transparent Equilateral Triangular Shaped Patch With Defected Ground 641

Track 9 : Vlsi & Embedded Systems

131. Performance Monitoring System For Driver With Light Motor Vehicle(LMV) Learner's License 647
132. VMFPGA: A Dynamic Approach For High Speed Computing 653
133. Thread Execution On Embedded Processor - ARM9 Core In Embedded Linux Environment 659
134. Traffic Congestion Alerting System 664
135. Mine Security By FPGA Based Robot 669
136. Effective Street Light Automation By Self Responsive Cars For Smart Transportation 673
137. Development Of Processor Engine For FPGA Based Clock Gating And Performing Power Analysis 678
138. Smart Door Lock And Lighting System Using Internet Of Things N/A
139. Simulation Dual Spacer Double Gate Junctionless Transistor For Digital Integrated Circuits. 683
140. Circularly Polarized MIMO Monopole Antenna With Defected Ground Structure For S- Band Application 687
141. Design And Implementation Of Grip Assisting Glove For Patients Suffering From Cerebral Tremors 691
142. Vehicle To Vehicle Communication For Crash Avoidance System 697
143. Synthesizable Quaternary Logic Blocks 700
144. Power Optimization In 8T SRAM Cell 703
145. COMPARATIVE ANALYSIS OF EMBEDDED COMPUTING PLATFORMS FOR FIR FILTER IMPLEMENTATION 707
146. Pass Transistor Adiabatic Logic With NMOS Pull-Down Configuration In Stand-By Mode 711
147. The Review Of Detection And Classification Of Epilectic Seizures Using Wavelet Transform 716
148. An Integrated Tool For Automation Of Custom IC Design Flow 721
149. Fifth Derivative Gaussian Pulse Generator For UWB Application 725
150. Modelling An Equivalent Structure Of Dumbbell DGS For Microstrip Filters 729
151. Development Of Cloud Based Light Intensity Monitoring System For Green House Using Raspberry Pi 734
152. Wearable Sensors Based Pilgrim Tracking And Health Monitoring System 738
153. Implementation Of FM0/Manchester Encoding Using SOLS Technique For DSRC Application 743
154. Design & Implementation Of 32-Bit Delay Efficient CBA Circuits Using Block Structures N/A

Track 10 : Control & Automation

155. Voice Driven Dynamic Generation Of Webpages 839
156. Automation In Library Management Using Labview 749
157. Development Of SCADA System For CTT Turbo Lab 754
158. Method And Apparatus For Safety Using Inflated Bags Through Smart Sports Clothes 758
159. Design Of Single Phase Phasor Measurement Unit Prototype 762
160. Robust Uncertainty Compensation In Maglev By Using Extended State Observer 767
161. UVTG Base Dynamic Voltage Restorer For Mitigation Of Voltage Sag 773
162. Design Of Intelligent System For Indoor Lighting 779
163. Study Of Semiconductor Switches For Electromagnetic Launcher 783
164. Automatic Temperature Control Technique For A Clinical Water Bath 788
165. STUDY OF THE HYPERVELOCITY PROJECTILE LAUNCHERS 792

166. Monitoring Breathing Rate Using Bio-Impedance Technique 797
167. Sag And Unbalance Mitigation Using DVR In Three- Phase Four-Wire Distribution Network 800
168. A Compact Printed Wide-Slot UWB Antenna With Band-Notched Characteristics 805
169. Iot Based Smart City Traffic Alert System Design 811
170. Non Functional Requirement Analysis In Iot Based Smart Traffic Management System 817
171. Data Selection And Filtration Technique For Tuning Virtual Sensor Model Of Nox Estimation In MATLAB 823
172. Test Automation For Engine Warmup Feature Testing 827
173. Printed Hexagonal Slot Antenna For UWB Applications 831
174. Human Machine Interface In Internet Of Things System 835
175. Voltage Quality Enhancement Using CSC Based Unified Power Quality Conditioner N/A