# 2015 International Conference on Computing and Communications Technologies (ICCCT 2015)

## Chennai, India
## 26-27 February 2015

**IEEE Catalog Number:** CFP1592Y-POD
**ISBN:** 978-1-4799-7624-9

**Copyright © 2015 by the Institute of Electrical and Electronic 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: CFP1592Y-POD
ISBN 13: 978-1-4799-7624-9

**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

| Session – I | |
|---|---|
| **Theme : Data Mining and Web Service Applications** | **Venue: D2101** |
| **CHAIR PERSONS**<br>• **Dr. Angelina Geetha, Professor, Department of CSE, Crescent University, Chennai.**<br>• **Dr. E. Priya, Department of ECE, Sri Sairam Engg. College, Chennai.** | **Date : 26-02-015**<br>**Time: 2.00 PM to 4.00 PM** |


| Paper ID | Title | Page No |
|---|---|---|
| 8 | **Feature Subset Selection based on Filter Technique**<br>*K. Fathima Bibi, Dr. M. Nazreen Banu* | 1 |
| 31 | **Intelligent prediction model for learners outcome forecasting in E-learning**<br>*M.Ravichandran, Dr.G.Kulanthaivel* | 7 |
| 73 | **Evolution Strategy Classification Utilizing Meta Features and Domain-specific Statistical A Priori Models for Fully-automated and Entire Segmentation of Medical Datasets in 3D Radiology**<br>*Gerald Zwettler, Werner Backfrieder* | 12 |
| 153 | **Raga Identification of Carnatic Music Using Iterative Clustering Approach**<br>*Hannah Daniel, Dr. A. Revathi* | 19 |
| 182 | **STREE: A Secured Tree based Routing with Energy Efficiency in Wireless Sensor Network**<br>*Roopashree H.R, Dr. Anita Kanavalli* | 25 |
| 29 | **Agent Based Weighted Page Ranking Algorithm for Web Content Information Retrieval**<br>*Nagappan V.K, Dr. P. Elango* | 31 |
| 312 | **Reconstruction of User Sessions from Web Server Log**<br>*A.Hemapriya, M.S.Bhuvaneswari, Dr. K. Muneeswaran* | 37 |
| 235 | **On service-enhanced product recommendation Guiding users through complex product specification**<br>*Hamideh Afsarmanesh, Mohammad Shafahi, Mahdi Sargolzaei* | 43 |
| 378 | **Feature Extraction Grid Approach for Detecting the Sentiment Strength of the Opinions**<br>*Deepak Thakur, Tanya Gera, Jaiteg Singh* | 49 |
| 194 | **Biclustering Analysis on Class Discovery From Gene Expression Data**<br>*S.Anitha, C.P.Chandran* | 55 |

| | | |
|---|---|---|
| 365 | **Phishing Websites Detection through Supervised Learning Networks**<br>*Priyanka Singh, Yogendra P.S. Maravi, Sanjeev Sharma* | 61 |
| 62 | **Speed Analysis of Wireless Communication Technology Banked on HBT: An Analytical Approach to Determine the Impact of GaAs/GaAsBi Diode Model**<br>*Farhana Afrin, Twisha Titirsha* | 66 |

## Session – II

| | |
|---|---|
| **Theme : Wireless Computing and Sensor Networks** | **Venue: D2102** |
| **CHAIR PERSONS**<br>• **Dr. C. Jayakumar, Professor, Dept. of CSE, RMK Engineering College, Chennai.**<br>• **Dr. Meenakshi, Dept of EEE, Sri Sairam Engg. College, Chennai.** | **Date : 26-02-2015**<br>**Time: 2.00 PM to 4.00 PM** |

| | | |
|---|---|---|
| 38 | **Cross Layer Coding For Scalable Data Communication In Wireless Sensor Network**<br>*Prof. Ms. A.K. Patil Prof.Dr.A.J.Patil* | N/A |
| 339 | **Understanding Multisensor Fusion With an Unique Approach of DataMining**<br>*Anup Basil, Gitanjali J* | 77 |
| 199 | **Reviewing The Research Paradigm Of Techniques Used In Data Fusion In WSN**<br>*Jayasri B.S, Dr. G. Raghavendra Rao* | 83 |
| 222 | **Performance Analysis Of CPW-Fed Hexagonal Shaped Metamaterial Antenna For Wimax/WLAN Applications**<br>*Divya Chaturvedi*, T. Shanmuganantham, Arvind Kumar* | 89 |
| 316 | **Collaborative Enterprise Networks For Solar Energy**<br>*Luis M. Camarinha-Matos, Ana Inês Oliveira, Filipa Ferrada ,Petr Sobotka, Andrea Vataščinová,Victor Thamburaj* | 93 |
| 197 | **Simulation And Performance Analysis Of Solar Pv-Wind Hybrid Energy System Using Matlab/Simulink**<br>*B.Kanagasakthivel, Dr.D.Devaraj* | 99 |
| 382 | **Wireless Impetus Technology On Synaesthetic Ambient Intelligence (WITS-AI)**<br>*L Rajendrakumar, M.Susila* | 105 |
| 166 | **Intelligent Network Design For Real Time Monitoring And Management Of Data Transmission In M2M Environment**<br>*G.Adiline Macriga, M.Gowsalya Devi* | 109 |
| 178 | **Energy Trading Spectrum Using Power Re-Distribution In Wireless Sensor Networks**<br>*M.Nivethamani, Soma Prathibha* | 114 |

| | | |
|---|---|---|
| 9 | **A Hybrid Population Seeding Technique Based Genetic Algorithm For Stochastic Multiple Depot Vehicle Routing Problem**<br>*Sathyanarayanan S, Dr. K. Suresh Joseph, Dr.S.K.V.Jayakumar* | 119 |
| 33 | **HRV Analysis Using Ballistocardiogram With Labview**<br>*Sajeev K. Jose, Chandan M. Shambharkar, Job Chunkath* | 128 |
| **Session – III** | | |
| **Theme : Network Communication & Information Security** | **Venue: D2103** | |
| **CHAIR PERSONS**<br>• **Dr. S. Bose, Assoc. Professor, Dept. of CSE, Anna University, Chennai.**<br>• **Dr.Muruga Radha devi, Professor, Dept. of IT, Sairam Institute Of Technology, Chennai.** | **Date : 26-02-2015**<br>**Time: 2.00 PM to 4.00 PM** | |
| 183 | **Image Encryption and Decryption in Public Key Cryptography based on MR**<br>*D.I.George Amalarethinam, J.Sai Geetha* | 133 |
| 301 | **Phishing - The threat that still exists**<br>*K. Nirmal, B. Janet, R. Kumar* | 139 |
| 238 | **A Reliable and Secure Data Transmission in CEAACK MANETs using Distinct Dynamic Key with Classified Digital Signature Cryptographic Algorithm**<br>*J.Sathiamoorthy, Dr.B.Ramakrishnan, Usha.M* | 144 |
| 322 | **A Secure Authentication Scheme in Adhoc Network Using Threshold Cryptography**<br>*Lalita Priya, Dr. Kakali chatterjee* | 152 |
| 320 | **A Novel Differential Phase Shift Quantum Key Distribution Scheme for Secure Communication**<br>*Upendra Singh Chahar, Dr. Kakali Chatterjee* | 156 |
| 42 | **Preventing Shoulder Surfing in Secure Transactions**<br>*M.Hindusree Dr.R.Sasikumar* | 160 |
| 41 | **An ID-Based Privacy Preservation for VANET**<br>*N. Vijayalakshmi Dr. R. Sasikumar* | 164 |
| 273 | **Designing a Bio-Capsule Secure Authentication Systems**<br>*R. Logeshwari, K.Karthikayani, A.Sindhuja, D.Ashok* | 168 |
| 264 | **Trust aware systems in Wireless Sensor Networks**<br>*Rani.T.P , JayaKumar.C, Divya* | 174 |
| 176 | **Secure Multi-Party Computation in Differential Private Data with Data Integrity Protection**<br>*Sundari S, Ananthi M* | 180 |
| 319 | **Cloud-based Collaboration Spaces for Enterprise Networks**<br>*Luis M. Camarinha-Matos, Adrian Juan-Verdejo, Spiros Alexakis, Holger Bär, Bholanath Surajbali* | 185 |

| | | |
|---|---|---|
| 141 | **Word Level Translation (Tamil – English) with Word Sense Disambiguation in Tamil Using OntNet.**<br>*Dr.R.Padmamala* | 191 |

## Session – IV

| | |
|---|---|
| **Theme : Wireless Communication and Networks** | **Venue: D2104** |
| **CHAIR PERSONS**<br>• **Dr. J. Raja, Professor, Department of ECE, Sri Sairam Engg. College**<br>• **Dr. Rajarajan, Professor, Department of ECE, Sri Sairam Institute of Technology** | **Date : 26-02-2015**<br>**Time: 2.00 PM to 4.00 PM** |

| | | |
|---|---|---|
| 255 | **Selection of path computation algorithms in PCE based GMPLS controlled WSON**<br>*P. Selvaraj, V. Nagarajan* | 199 |
| 256 | **Performance Analysis of PAPR Reduction in OFDM Using Combined Approach Method**<br>*Thota Sravanti, N Vasantha* | 205 |
| 207 | **Traffic Engineering based on Spectral Radius in Optical Networks**<br>*V.Anusuya, D. Sheela and C. Chellamuthu* | 210 |
| 174 | **Design and performance analysis of Visible Light Communication system through simulation**<br>*K.Sindhubala and B.Vijayalakshmi* | 215 |
| 77 | **Design of a Quad Band Microstrip Antenna for Wearable Wireless Devices and Investigations on Substrate types and Performance at various Body Sites**<br>*Varshini Karthik, T.Rama Rao* | 221 |
| 7 | **Analysis and Design of Low Power Radix-4 FFT Processor using Pipelined Architecture**<br>*P.Augusta Sophy, R.Srinivasan, J.Raja, M.Avinash* | 227 |
| 250 | **Analysis of MEMS Electrostatic Comb Drive with Polysilicon as the Structural Material**<br>*Himanshu Ranjan Das, R.Nakkeeran* | 233 |
| 258 | **Optimization of Bilateral Filter Parameters for Edge Preserving Impulse Noise Removal**<br>*S.V.Priya, Dr.R.Seshasayanan* | 237 |
| 383 | **Single Tree Search Sphere Decoding Algorithm For MIMO Communication System**<br>*P. Prakash and M. Kannan* | 241 |
| 265 | **Comparison of Spectrum Sensing in MDFT Modulated Filter Banks and OFDM based Cognitive Radio Systems**<br>*Ling Zhuang, Kai Wang, Kai Shao, Guangyu Wang* | 246 |
| 26 | **Implementation of Fuzzy Pid Controller for SO2 Emission Control Process**<br>*Kanimozhi.L, V.Vetriyvel, Maheswari.C, R.Vinoth* | 251 |

| Session – V | | |
|---|---|---|
| **Theme : Data Communication and Embedded Applications** | | **Venue: D2101** |
| **CHAIR PERSONS**<br>• **Dr. V. Pattabiraman, Assoc. Professor, School of Computer Science and Engineering, VIT University, Chennai.**<br>• **Dr. Sumathi, Dept of ECE, Sri Sairam Engg.College, Chennai.** | | **Date : 27-02-2015**<br>**Time: 9.30 AM to 1.00 PM** |
| 6 | **Simulation And Modelling Of Pressure Part Scantling As Per International Codes**<br>Dr. S. Vaidyanathan | 256 |
| 244 | **Android Opencv Based Effective Driver Fatigue And Distraction Monitoring System**<br>*R.Manoharan , S.Chandrakala* | 262 |
| 211 | **Solution For Multicast Routing Problem Using Particle Swarm Optimization**<br>*Mrs. S.Amutha,S.Nivethalakshmi* | 267 |
| 291 | **Automatic Number Plate Recognition System Using Super-Resolution Technique**<br>*Balamurugan.G, Sakthivel Punniakodi, Rajeswari.K, Arulalan.V* | 273 |
| 305 | **A SCA-Resistant Processor Architecture Based On Random Delay Insertion**<br>*Zhangqing He, Bangmin Yang, Xingran Deng , Kui Dai, Xuecheng Zou* | 278 |
| 252 | **An Efficient Crl Authentication Scheme For Vehicular Communications**<br>*Ms. S. Vinothini, Ms. T. Subha* | 282 |
| 205 | **Bee Colony Based Auto Tuning Of Multiloop Fractional Order PID Controller For Two Interacting Conical Tank Process**<br>*U. Sabura Banu, S.K.Lakshmanaprabu* | 286 |
| 158 | **Reduced Complexity Maximum Likelihood Detection For DAPSK Based Relay Communication Systems**<br>*M.Kanthimathi, R.Amutha* | 292 |

| | | |
|---|---|---|
| 179 | **A Novel Approach For Travel Package Recommendation Using Bayesian Approach**<br>*Anishya, Sureshkumar,Varalakshmi* | 296 |

## Session – VI

| | |
|---|---|
| **Theme : Applications on Neural Networks and Network Computing** | **Venue: D2102** |
| **CHAIR PERSONS**<br>• **Dr. S. S. Sridhar,Professor, Dept. of CSE, SRM University, Chennai.** | **Date : 27-02-2015**<br>**Time: 9.30 AM to 1.00 PM** |
| • **Dr. G. Adiline Macriga, Professor, Department of IT, Sri Sairam Engg. College, Chennai.** | |

| | | |
|---|---|---|
| 175 | **Detecting Visual Saliency Using Image Signature**<br>*M.Karthikeyan, K.Muneeswaran* | 302 |
| 132 | **Optimized Rotation Invariant Content Based Image Retrieval With Local Binary Pattern**<br>*Raja Vadhana .P, Nagalakshmi Venugopal, Kavitha .S* | 306 |
| 49 | **Efficient Modelling Of Video Compression On Demand In Peak Traffic Condition Using HEVC**<br>*Murthy SVN, Dr. Sujatha BK* | 312 |
| 214 | **LTE Performances Of Uplink PUSCH Under AWGN & VA30 Fading Channel.**<br>N.Prabakaran | 318 |
| 379 | **Identifying Deceptive Reviews Using Networking Parameters**<br>*Tanya Gera, Deepak Thakur, Jaiteg Singh* | 322 |
| 373 | **Optimized Local Route Repair And Congestion Control In Mobile Ad Hoc Network**<br>*Pravin Ranjan, R. Leela Velusamy* | 328 |
| 292 | **Automated Detection Of Toxicity In The Blood Samples Of Dye Factory Workers**<br>*E.Priya, A.Kumaran* | 334 |
| 217 | **Landmark Identification In 3d Image For Facial Expression Recognition**<br>*C.Sindhuja, Dr.K.Mala* | 338 |
| 281 | **Implementation Of An Adaptive Spectrum Sensing Technique In Cognitive Radio Networks**<br>*S.Lavanya, B.Sindhuja, M.A.Bhagyaveni* | 344 |
| 251 | **A Comprehensive Experimental Analysis Of Standard TCP Variants In Vehicular Environment**<br>*Joseph Auxilius Jude, Revathi Ganesan* | 350 |

| | | |
|---|---|---|
| 91 | **Dynamic And Integrated Approach For Proxy-Mobile-Ipv6 (Pmipv6) Based IP Flow Mobility And Offloading**<br>*Madhavan Kalyanaraman, Swaminathan Seetharaman,Dr,s.Srikanth* | 356 |

## Session – VII

| | |
|---|---|
| **Theme : Advancements in Networks and Cloud Computing** | **Venue: D2103** |
| **CHAIR PERSONS**<br>• **Dr. Sumathi, Head, Department of Information Management System, Sri Venkateswara Engg. College, Chennai.**<br>• **Ms. Soma Prathiba, Asso. Professor, Dept. of IT, Sri Sairam Engg. College, Chennai.** | **Date : 27-02-2015**<br>**Time: 9.30 AM to 1.00 PM** |

| | | |
|---|---|---|
| 302 | A Comprehensive Study Of Cross – Layer Approaches For Improving TCP Performance In Wireless Networks<br>*Hardik K. Molia, Rashmi Agrawal* | 362 |
| 94 | **HPCA: A Node Selection And Scheduling Method For Hadoop Mapreduce**<br>*Archana.G.K, V.Deeban Chakravarthy* | 368 |
| 96 | **Efficient Scheduling Of Independent Tasks Using Modified Heuristics**<br>*Mohammad Atique* | 373 |
| 154 | **Tracking The Student's Performance In Web-Based Education Using Scrum Methodology**<br>*M.Mahalakshmi, Dr.M.Sundararajan* | 379 |
| 76 | **Effective Data Stream Mining Using Ensemble On Cloud With Load Balancing (E2CL)**<br>*Jagadheeswaran Kathirvel, Dr. Elango Parasuraman* | 383 |
| 237 | **Secure Data Access Control For Multi-Authority Quantum Based Cloud Storage**<br>*Dr.K.Vidya, Assistant Professor, A.Abinaya* | 387 |
| 181 | **A Cluster Based Signature Evaluation Mechanism For Protecting The User Data In Cloud Environment Through Fuzzy Ordering Approach**<br>*Ms. R. Poorvadevi, Dr. S. Rajalakshmi* | 392 |
| 338 | **A Software Architecture For A Fully Decentralized Peer To Peer System**<br>*Arya Ravi, Meghana I.S, K. Chandrasekaran* | 398 |
| 187 | **Mobile Streaming For Qos Approach In Media Cloud**<br>*Subbiah Sankari, Kannadasan Ashwini , Perumal Varalakshmi* | 403 |
| 190 | **Network Traffic Analysis Of Cloud Data Centre**<br>*Subbiah Sankari, Perumal Varalakshmi, Boopathi Divya* | 408 |