



Conference Program



Day 1: Saturday, August 13, 2016 (Venue: Lecture Hall Complex - A)

08:30 – 09:15 : Breakfast and Registration

09:15 – 10:00 : Inauguration

10.00 – 10:45 : Keynote by Prof. K. V. S. Hari, Chairman, IEEE Bangalore Section

10.45 – 11:15 : Tea break

11:15 – 12:45 : Invited talk by Dr. Narasimha Bhat, CEO, Manipal Dot Net Pvt. Ltd.

12:45 – 13:45 : Lunch break

13:45 – 14:30 : Keynote by Prof. Gunar Schirner, Dept. of ECE, Northeastern University, USA

14:30 – 15:45 : Paper presentation sessions in parallel

Session 1A: Distributed Computing

| Paper ID | Title of the paper |
|----------|---|
| 11 | SIMOP-A Fast Tool for Generating OPTimum Dilutions of Microfluidic Samples using SIMulation |
| 12 | Energy Aware SLA and Green Cloud Federations |
| 13 | A Survey on Replacement Strategies in Cache Memory for Embedded Systems |
| 21 | Performance Analysis of Protein Structure Clustering Techniques and CUDA Implementation of RMSD Computation |

Session 2A: Communications

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| 1 | System for NFC and Audio Multiplexing |
| 62 | A Comparative Study of Horn Antennas suitable for the Transmitting Antenna Array Module of MELISSA Architecture |
| 100 | Design and Development of Remote Load Monitoring Suitable For Non-Residential Loads Through Wireless Data Transmission |
| 105 | Saturation Throughput Analysis of IEEE 802.11ad Wireless LAN in the Contention Based Access Period (CBAP) |

Session 3A: VLSI

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| 90 | Reliable Logic Design with Defective Nano-Crossbar Architecture |
| 93 | 2-D Potential model for short channel Common Double Gate (CDG) MOSFETs adapted to gate-oxide thickness asymmetry |
| 94 | A Power Efficient Phase Frequency Detector And Low Mismatch Charge Pump In On-Chip Clock Generator |

Session 4A: Electrical and Electronic Circuits

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| 38 | 1.5°C Accurate CMOS Temperature Sensor with a Single Point Trim at 85°C |
| 66 | Implementation of Combinational circuits via Material Implication using Memristors |
| 68 | All Optical Reversible Design of Mach-Zehnder Interferometer based Carry-Skip Adder |

Session 5A: Robotics

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| 64 | Radio Frequency Controlled Robotic Arm |
| 144 | Low cost in-pipe Leak Detection Robot |
| 195 | Automation of end effector guidance of robotic arm for Dental Implantation using Computer Vision |
| 199 | Adaptive attitude control of the Spherical drone on SO(3) |

15:45 – 16:00 : Tea break

16:00 – 17:30 : Paper presentation sessions in parallel

Session 1B: Distributed Computing

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| 45 | A Comparative Study of Different Auto-Focus Methods for M. Tuberculosis Detection from Brightfield Microscopic Images |
| 106 | Speaker Verification with Optimized Feature Subset using MOBA |
| 110 | FRORSS: Fast Result Object Retrieval using Similarity Search on Cloud |
| 135 | Algorithms for minimizing the Receiver interference in a Wireless Sensor Network |

Session 2B: Communications

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| 164 | Coaxial Antenna for Microwave Ablation |
| 168 | Interference Alignment for the K-user MIMO X Network Using Time Division Multiple Access |
| 169 | Optimal Overhead Selection for Interference Alignment in Time-varying Two-user MIMO X Channel |
| 186 | Software Defined Networking for Optical Networks |

Session 3B: VLSI

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| 95 | A 1.3V-1.8V Configurable Phase Locked Loop With An Adaptive Charge Pump |
| 96 | Design and Performance Comparison of Adiabatic 8-bit multipliers |
| 102 | A Low-Energy Area-Efficient Dual Channel SAR ADC Using Common Capacitor Array Technique |
| 131 | Autocorrelation based Spectrum Sensing Architecture on FPGA with Dynamic Offset Compensation |

Session 4B: Electrical and Electronic Circuits

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| 91 | Handheld Electrochemical Workstation for Serum Albumin Measurement |
| 92 | Efficient Multiplexer Design and Analysis using Quantum dot Cellular Automata |
| 101 | EMG Controlled Low Cost Prosthetic Arm |
| 107 | Mesh Analysis by Direct Matrix Manipulation a Different Approach |



Conference Program



Day 2: Sunday, August 14, 2016 (Venue: Lecture Hall Complex – A)

08:30 – 09:00 : Breakfast

09:00 – 10:00 : Keynote by Dr. Peter Aiken, Founding Director, Data Blueprint, Richmond, USA

10.00 – 11:30 : Invited talk by Prof. Deviprasad M., School Of Information Science, Manipal University

10.00 – 11:30 : (Parallel session) Startup Conclave

11.30 – 11:45 : Tea break

11:45 – 13:00 : Paper presentation sessions in parallel

Session 1C: Distributed Computing

| Paper ID | Title of the paper |
|----------|---|
| 163 | Identification of Gene Network Motifs for Cancer Disease Diagnosis |
| 174 | Mutual Fund Performance Prediction |
| 179 | A Comparative study of classifiers for music genre classification based on feature extractor |
| 181 | An Efficient Framework of Data Mining and its Analytics on Massive Streams of Big Data Repositories |

Session 2C: Communications

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| 200 | Spectrum Sensing in presence of Cauchy Noise through Differential Entropy |
| 16 | Fault Identification and Isolation in Pneumatic Valve using Image Processing |
| 27 | Experimental Analysis of RSSI-based Distance Estimation for Wireless Sensor Networks |
| 59 | Signal Processing Computation based Seismic Energy Estimation of Blast induced Ground Vibration Waves |

Session 3C: VLSI

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| 198 | Analysis and Verification of Hard Tie-off Signals of SoC |
| 201 | FPGA Prototyping and Parameterized based Resource Evaluation of Network on Chip Architecture |
| 57 | Compiler Optimization for Superscalar and Pipelined Processors |
| 75 | A 1.8V 11.02 μ W Single-Ended Inverter-Based OTA with 113.62 dB Gain |

Session 4C: Electrical and Electronic Circuits

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| 108 | A Novel Approach to Precisely Control Linear Movement of Sensor by Motor using Microstepping |
| 123 | Design and Simulation of NFC Printed Antenna in Near Field Wireless Communication for SDC |
| 188 | Modelling of Sleeve Monopole Antenna in a Coupling Medium for Breast Imaging Application |
| 191 | Design and Development of an Athletic Health Monitoring System Using fNIRS |

13:00 – 13:45 : Lunch break

13:45 – 15:15 : Invited talk by Prof. K. V. Gangadharan and Dr. Pruthviraj Umesh, CSD, NITK Surathkal

15:15 – 15:30 : Tea break

15:30 – 16:10 : Paper presentation sessions in parallel

Session 1D: Distributed Computing

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| 236 | Sound Event Detection from Urban Soundscape using Two-level Classification |
| 237 | Crowdsourcing for Disaster Relief : A Multi-platform Model |

Session 2D: Communications

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| 80 | Efficient location selection for computations of expensive Log-Gabor features using novel directional enhancement |
| 118 | Improving Energy Efficiency Performance of ALOHA based Underwater Acoustic Sensor Networks |

Session 3D: VLSI

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| 111 | An Efficient FPGA Based Implementation of Forward Integer Transform and Quantization Algorithm of H.264 |
| 119 | Implementation of Real time Moving Object Detection and Tracking on FPGA for Video Surveillance Applications |

Best Paper Awards / Closing Remarks