

Preface

This AISC volume contains selected papers presented at the 9th International Conference on Advanced Computing and Communication Technologies (9th ICACCT 2015), technically sponsored by Institution of Electronics and Telecommunication Engineers (India) and the Computer Society of India; held on 28 and 29 November 2015 at Asia Pacific Institute of Information Technology, Panipat, India.

The technical program at 9th ICACCT 2016 featured four keynote addresses, an industrial presentation, nine contributed paper sessions and a plenary session. Keynote speakers were Prof. J.K. Mandal, University of Kalyani; Dr. Dhananjay Bhattacharyya, Saha Institute of Nuclear Physics, Kolkata; Dr. Nitin Auluck, Indian Institute of Technology Ropar and Prof. Akhilesh Upadhyay, Sagar Institute of Research & Technology, Bhopal. Titles of their addresses were ‘Security and Authentication in Public Domain Networks anchored with Chaos Dynamics’; ‘Variation of Stacking Interactions in DNA and RNA: Dispersion Corrected Density Functional Theory Based Studies’; ‘Scheduling Challenges for the Next Generation Heterogeneous Architectures’; ‘Evolving Multimodal Framework for Human Behaviour Interpretation System’ and the industrial presentation on ‘Recent Trends in Mobile Networks’ was made by Mr. Manish Vohra of Samsung Research Centre, New Delhi.

An overwhelming number of papers were received in response to the call for papers. The submitted papers were scanned for similarity index, and subsequently the contributions were peer reviewed by program committee members. After a rigorous peer-review process, the final selection of 58 presented and revised contributed papers, corresponding to an acceptance rate of 17 %, was determined by these evaluation processes with the recommendations of the editorial board.

The papers included in this volume cover a wide range of topics spanning theory, system and challenging applications pertaining to algorithms; soft computing algorithms, e.g. GA, SA, ACO and hybrid DS-fuzzy logic; system-on-chip design; real-time mitigation of DDoS; in silico drug design; epidemiological model; finite difference scheme for Stokes flows; simulation of Shor’s algorithm; vertex

bisection minimization problem; dynamic facility layout problem; 3D robot vision; Monte Carlo simulation; speech processing; data analytics; embedded systems testing; image compression and encryption; microstrip antenna design; RF-MEM systems; mesh-based networks; energy-efficient wireless sensor networks; etc.

We would like to thank the reviewers, the authors of all contributed papers and selected papers, the keynote speakers, and the session chairs, for their enormous contributions towards the success of this conference. We are thankful to the authors of the finally selected papers for suitably incorporating the changes suggested by the reviewers in the scheduled time frame. It is our pleasure to acknowledge the inspiring guidance of Conference General Chair, Prof. Lalit M. Patnaik, Adjunct Professor and INSA Senior Scientist, National Institute of Advanced Studies, Indian Institute of Science Campus, Bangalore, India in maintaining the high standards of the conference. The timely support of the Institution of Electronics and Telecommunication Engineers (India) and from Dr. Anirban Basu, Vice President and President Elect, Computer Society of India, in technically sponsoring the conference is gratefully acknowledged. We are indebted to Mr. Aninda Bose, Senior Editor, Springer India Pvt. Ltd. for his valuable advises on various issues related to the proceedings publication. The Organizing Committee at APIIT, Panipat did a wonderful job in coordinating various activities. Finally, we would like to thank the volunteers for their unforgettable, tireless and diligent efforts.

We hope the proceedings will inspire more research in computation, communication technologies and in solving complex and intricate real-world problems.

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