

# Preface

The volumes contain the papers presented at the *International Conference On Soft Computing Systems* (ICSCS) held during 20 and 21 April 2015 at Noorul Islam Centre for Higher Education, Noorul Islam University, Kumaracoil. ICSCS 2015 received 504 paper submissions from various countries across the globe. After a rigorous peer-review process, 182 full length articles were accepted for oral presentation at the conference. This corresponds to an acceptance rate of 36 % and is intended for maintaining the high standards of the conference proceedings. The papers included in these AISC volumes cover a wide range of topics on Genetic Algorithms, Evolutionary Programming and Evolution Strategies such as AIS, DE, PSO, ACO, BFA, HS, SFLA, Artificial Bees and Fireflies Algorithm, Neural Network Theory and Models, Self-organization in Swarms, Swarm Robotics and Autonomous Robot, Estimation of Distribution Algorithms, Stochastic Diffusion Search, Adaptation in Evolutionary Systems, Parallel Computation, Membrane, Grid, Cloud, DNA, Quantum, Nano, Mobile Computing, Computer Networks and Security, Data Structures and Algorithms, Data Compression, Data Encryption, Data Mining, Digital Signal Processing, Digital Image Processing, Watermarking, Security and Cryptography, Bioinformatics and Scientific Computing, Machine Vision, AI methods in Telemedicine and eHealth, Document Classification and Information Retrieval, Optimization Techniques and their applications for solving problems in these areas.

In the conference separate sessions were arranged for delivering the keynote address by eminent members from various academic institutions and industries. Three keynote lectures were given in two different venues as parallel sessions on 20 and 21 April 2015. In the first session, Dr. Pradip K. Das, Associate Professor, Indian Institute of Technology, Guwahati gave a talk on “Trends in Speech Processing” in Venue 1 and Prof. D. Thukaram, Department of EEE, IISC, Bangalore, gave a lecture on “Recent Trends in Power System” and covered various evolutionary algorithms and its applications to Power Systems in Venue 2. In the second session, Dr. Willjuice Iruthayarajan, Professor, Department of EEE, National Engineering College, Kovilpatti, gave a talk on “Evolutionary

Computational Algorithm for Controllers” at Venue 1. All these lectures generated great interest among the participants of ICSCS 2015 in paying more attention to these important topics in their research work. Four sessions were arranged for electrical-related papers, five sessions for electronics-related papers, and nine sessions for computer-related papers.

We take this opportunity to thank the authors of all the submitted papers for their hard work, adherence to the deadlines and for suitably incorporating the changes suggested by the reviewers. The quality of a refereed volume depends mainly on the expertise and dedication of the reviewers. We are indebted to the Program Committee members for their guidance and coordination in organizing the review process.

We would also like to thank our sponsors for providing all the support and financial assistance. We are indebted to our Chairman, Vice Chancellor, Advisors, Pro Vice Chancellor, Registrar, faculty members and administrative personnel of Noorul Islam Centre for Higher Education, Noorul Islam University, Kumaracoil, for supporting our cause and encouraging us to organize the conference on a grand scale. We express our heartfelt thanks to Profs. B.K. Panigrahi and S.S. Dash for providing valuable guidelines and suggestions in the conduct of the various parallel sessions in the conference. We also thank all the participants for their interest and enthusiastic involvement. Finally, we thank all the volunteers whose tireless efforts in meeting the deadlines and arranging every detail meticulously made sure that the conference could run smoothly. We hope the readers of these proceedings find the papers useful, inspiring and enjoyable.

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