

# Preface

Unlike hard computing, the guiding principle of soft computing is exploiting the tolerance for imprecision, uncertainty, partial truth, and approximation to achieve tractability, robustness, and low solution cost, the role model being the human mind. The areas that come under the purview of Soft Computing include Fuzzy Logic, Neural Computing, Evolutionary Computation, Machine Learning and Probabilistic Reasoning, with the latter subsuming belief networks, chaos theory and parts of learning theory. The successful applications of soft computing and its rapid growth suggest that the impact of soft computing will be felt increasingly in the coming years. Soft computing is likely to play a very important role in science and engineering, but eventually its influence may extend much farther.

After the successful completion of the First International Conference on Soft Computing for Problem Solving in 2011 (SocProS 2011) at IIT Roorkee, the 2nd of the series, Second International Conference on Soft Computing for Problem Solving (SocProS 2012), was held in JK Lakshmipat University (JKLU), Jaipur, during December 28–30, 2012. It had been a matter of great privilege and pleasure to organize SocProS 2012 at JKLU, Jaipur. The response had been overwhelming and heartwarming. We had received 312 paper submissions of which 200, i.e., 64 % had been accepted for presentation. The review process included double review of submitted papers by an International team of reviewers using Easy Chair as online conference management software. There were 20 Technical Sessions including two Special Sessions, besides five Keynote Addresses by eminent Academicians and Scientists from different parts of the world that made SocProS 2012 an enriching experience to all the participants. In addition, there was one Workshop on Game Programming and one Special Tutorial on Brain like computing as a part of this conference. There were 144 Programme Committee members and 20 International Advisory Committee members from across the world associated with SocProS 2012.

We would like to express our sincere gratitude to Dr. Madhukar Gupta, Divisional Commissioner, Government of Rajasthan for gracing the occasion as the Chief Guest for the Inaugural Session.

We would also like to extend our heartfelt gratitude to all Programme Committee and International Advisory Committee members. We sincerely thank the Keynote Speakers Prof. Dipankar Dasgupta from University of Memphis—USA,

Prof. Anirban Bandyopadhyay from National Institute of Material Sciences (NIMS)—Japan, Prof. Ravindra Gudi from IIT Bombay—Mumbai, Prof. D. Nagesh Kumar from IISc—Bangalore and Prof. Ajoy Ray from Bengal Engineering and Science University (BESU)—Howrah.

We are grateful to Prof. Anirban Bandyopadhyay for conducting a Special Tutorial also in addition to delivering Keynote Address. We thank Mr. Arijit Bhattacharyya from Virtual Infocom—Kolkata for conducting the Workshop.

We thank the invited guests for accepting our invitation and also for chairing the technical sessions. We thank Dr. Kannan Govindan and Dr. P. C. Jha for delivering the Invited Talks. We express sincere thanks to the entire national and local organizing committee members for their continuous support and relentless cooperation right from the conception to execution in making SocProS 2012 a memorable event. We thank all the participants who had presented their research papers and attended the conference. A special mention of thanks is due to our student volunteers for the spirit and enthusiasm they had shown throughout the duration of the event, without which it would have been difficult for us to organize such a successful event.

Thanks are due to Springer for Publishing the Conference Proceedings. We hope that the Proceedings will prove helpful towards understanding about Soft Computing in teaching as well as in their research and will inspire more and more researchers to work in this interesting, challenging and ever growing field of Soft Computing.

We are thankful to the JKL family for the support given in making this mega event successful. We sincerely hope that the delegates had certainly taken home several pleasant memories of SocProS 2012 with them.

We are honoured and it has been a proud privilege to be associated with this Second International Conference on SocProS 2012 as its General Chairs.

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Proceedings of the Second International Conference on  
Soft Computing for Problem Solving (SocProS 2012),  
December 28-30, 2012

Babu, B.V.; Nagar, A.K.; Deep, K.; Pant, M.; Bansal, J.C.;  
Ray, K.; Gupta, U. (Eds.)

2014, XXX, 1604 p. 557 illus. In 2 volumes, not available  
separately., Softcover

ISBN: 978-81-322-1601-8