

Preface

This volume presents the research papers presented in the 5th International Conference Fuzzy and Neuro Computing (FANCCO) held during 17–19 December 2015 and hosted by Institute for Development and Research in Banking Technology (IDRBT), Hyderabad, India. It brought together researchers from academia and industry to report the latest cutting-edge research made in the areas of fuzzy computing, neuro computing and hybrid neuro-fuzzy computing in the paradigm of soft computing or computational intelligence.

We are grateful to Dr. Y.V. Reddy, former Governor, Reserve Bank of India, for inaugurating the conference. Five internationally renowned experts from four countries, namely Prof. Nikola Kasabov, Auckland University of Technology, New Zealand; Prof. Vipin Kumar, University of Minnesota, USA; Prof. Tadihiko Murata, Osaka University, Japan; Prof. Dipti Srinivasan, National University of Singapore, Singapore and Prof. Raghuram Krishnapuram, Xerox Research India delivered keynotes on cutting-edge topics. Further, two pre-conference tutorials from internationally acclaimed Indian professors, Prof. B. Yagnanarayan and Prof. M. Narisimha Murty, respectively, from IIIT, Hyderabad and IISc, Bangalore were organized. We sincerely thank all the keynote speakers for having come from distant places to be present in the conference and sharing their invaluable knowledge and experience. We are also thankful to the tutorial speakers for readily accepting our request and delivering highly informative and thought-provoking tutorials.

After a rigorous academic review of the 68 submissions from all over the world, the International Programme Committee members and some additional reviewers selected 27 papers for presentation at the conference. We sincerely thank all the PC members and additional expert reviewers for their unwavering support and putting enormous efforts in reviewing and accepting the papers. Without their untiring efforts and the contributing authors, the conference would not have been possible. There are seven papers from outside India, including countries such as USA, Russia, Hungary, New Zealand, Palestine, Fiji Islands, etc.

The entire process of submission, refereeing, e-communication of decision-making of the PC for accepting the papers was done through the

EasyChair system. We thank the administrators and creators of EasyChair for providing a highly configurable conference management system.

The accepted papers have a good, balanced mix of theory and applications. The techniques ranged from fuzzy neural networks, decision trees, spiking neural networks, self-organizing feature map, support vector regression, adaptive neuro-fuzzy inference system, extreme learning machine, fuzzy multi-criteria decision-making, machine learning, web usage mining, Takagi–Sugeno Inference system, extended Kalman filter, Goedel-type logic, fuzzy formal concept analysis, biclustering, etc. The applications ranged from social network analysis, twitter sentiment analysis, cross-domain sentiment analysis, information security, education sector, e-learning, information management, climate studies, rainfall prediction, brain studies, bioinformatics, structural engineering, sewage water quality, movement of aerial vehicles, etc.

We are grateful to the Microsoft, India for being the Platinum sponsor and Teradata, India for being the Silver sponsor of the conference. We thank the IEEE Computer Society, Hyderabad Section and IEEE Computational Intelligence Society, Hyderabad Section for technically sponsoring the conference. We thank the Honorary Chair, Prof. Janusz Kacprzyk and general Chairs Prof. N.R. Pal, ISI Calcutta, Kolkata and Prof. Kalyanmoy Deb for their encouragement and support.

We thank the steering committee for providing IDRBT an opportunity to host the conference. We thank the local organizing committee at IDRBT which included Dr. B.M. Mehtre, Dr. Rajarshi Pal, Dr. P. Syam Kumar, Prof. Atul Negi, Dr. M. Naresh Kumar, G. Raghuraj, V. Belurgikar, P. Ratnakumar, S. Rashmi Dev, K.V.R. Murty, K. Srinivas, the administration, estate division, accounts division, library, publication division, house keeping and security division for supporting and ensuring the successful organization of the conference. We profusely thank Dr. A.S. Ramasastri, Director, IDRBT for providing unflinching support to the overall conduct of the conference right from the concept stage through the successful organization without which it would not have been possible to conduct the conference.

Last but not least, we are thankful to Dr. Thomas Ditzinger from Springer for readily agreeing to publish the proceedings in the AISC series and also his team for preparing the proceedings very carefully well within time for the conference.

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