Santanu Chaudhury Sushmita Mitra
C.A. Murthy P.S. Sastry
Sankar K. Pal (Eds.)

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# Pattern Recognition and Machine Intelligence

Third International Conference, PReMI 2009
New Delhi, India, December 2009
Proceedings

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# Preface

This volume contains the proceedings of the third international conference on Pattern Recognition and Machine Intelligence (PReMI 2009) which was held at the Indian Institute of Technology, New Delhi, India, during December 16–20, 2009. This was the third conference in the series. The first two conferences were held in December at the Indian Statistical Institute, Kolkata in 2005 and 2007.

PReMI has become a premier conference in India presenting state-of-art research findings in the areas of machine intelligence and pattern recognition. The conference is also successful in encouraging academic and industrial interaction, and in promoting collaborative research and developmental activities in pattern recognition, machine intelligence and other allied fields, involving scientists, engineers, professionals, researchers and students from India and abroad. The conference is scheduled to be held every alternate year making it an ideal platform for sharing views and experiences in these fields in a regular manner.

The focus of PReMI 2009 was soft-computing, machine learning, pattern recognition and their applications to diverse fields. As part of PReMI 2009 we had two special workshops. One workshop focused on text mining. The other workshop show-cased industrial and developmental projects in the relevant areas.

Premi 2009 attracted 221 submissions from different countries across the world. Each paper was subjected to at least two reviews; the majority had three reviews. The review process was handled by the Program Committee members with the help of additional reviewers. These reviews were analyzed by the PC Co-chairs. Finally, on the basis of reviews, it was decided to accept 98 papers. We are really grateful to the PC members and reviewers for providing excellent reviews. This volume contains the final version of these 98 papers after incorporating reviewers' suggestions. These papers have been organized into ten thematic sections.

For PreMI 2009 we had a distinguished panel of plenary speakers. We are grateful to Andrew G. Barto, Andrzej Skowron and Ramesh Jain for agreeing to deliver plenary talks. We also had invited talks delivered by Ajith Abraham, Pawan Lingras, Alfredo Petrosino, Partha Pratim Chakrabarti and Venu Govindaraju. Our Tutorial Co-chairs arranged an excellent set of pre-conference tutorials. We are grateful to all our invited and tutorial speakers.

We would like to thank the host institute, IIT Delhi, for providing all facilities for organizing this conference. We are grateful to Springer and National Centre for Soft Computing Research, ISI Kolkata for the necessary logistics and financial support. The success of the conference is also due to funding received from different government agencies and industrial partners. We are grateful to all of them for their active support. We are grateful to the Organizing Committee for their endeavor in making this conference a success.

The PC Co-chairs would like to especially thank our Publication Chair, Sumantra Dutta Roy, for his excellent contributions toward the publication process. We are also grateful to Dominic Ślęzak for his co-operation and help. Our patron, Surendra Prasad, and members of our Advisory Committee provided the required guidance.

PReMI 2005 and PReMI 2007 were successful conferences. We believe that you will find the proceedings of PReMI 2009 to be a valuable source of reference for your ongoing and future research activities.

Santanu Chaudhury
C.A. Murthy
S. Mitra
P.S. Sastry
S.K. Pal

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