

Meeting Reports

Conferences, Workshops & Summer Schools



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by Kuntal Ghosh, Program Chair

The International Conference on Pattern Recognition and Machine Intelligence (PReMI) has already established itself as one of the premier conferences in the domain of pattern recognition, image processing, machine learning, soft computing and allied areas. It is a biennial conference, some of the early versions of which were held in Kolkata, New Delhi, and Moscow. The 2015 edition in this series was held in Warsaw, Poland, after which it again returned to Kolkata in December, 2017. Through the years, PReMI has provided an international forum, encouraging academic and industrial collaboration among scientists, engineers, professionals, researchers, and students from India and abroad.

This was the seventh edition in this series and it gave us immense pleasure that it was held in the same year that marks the 125th birthday of the late Prof. Prasanta Chandra Mahalanobis, the founder of the Indian Statistical Institute

(ISI), the host organization of 7th PReMI. Professor Mahalanobis, renowned for proposing the Mahalanobis distance, was also the father of modern statistics in India. He was instrumental in inspiring the design of the first analog computer in India in 1953 at the Indian Statistical Institute. He also brought to ISI the first digital computer of India in the year 1955. As a mark of our respect to this monumental personality, we organized a Special Session on "Celebration of 125th Birth Anniversary of Professor P.C. Mahalanobis" during PReMI 2017.

PReMI 2017 was attended by a large number of researchers and leading experts from all over the world. Both the invited and technical sessions featured interesting lectures in classical as well as contemporary aspects of machine learning, with topics ranging from deep learning and Internet of Things (IoT) to computer vision and big data analytics. There were two exclusive special sessions on

"Deep Learning" and "Spatial Data Science and Engineering".

All together there were 293 submissions out of which 85 papers (29%) were accepted. These papers were published by Springer, Heidelberg, as Lecture Notes in Computer Science, Volume 10597 (<https://www.springer.com/gp/book/9783319698991>). The extended versions of some of the presented papers are currently being considered for publication in the reputed journals like *Fundamenta Informaticae* and *Applied Soft Computing*.

Altogether 25 student authors were provided with Flytxt and Springer fellowships as a mark of encouragement to come and present their work. There were also two awards, one for best student paper, and one for best young researcher presentation, both sponsored by Springer.

As had been the case in its earlier versions, PReMI 2017 had a balanced mixture of keynote

and invited talks some of which were delivered by excellent speakers like Vineet Bafna, Andrzej Skowron, Farzin Deravi, Upinder S. Bhalla, Uday B. Desai, Soumen Chakraborti, and Shalabh Bhatnagar.

A pre-conference tutorial was specially designed comprising a set of lectures on Rough Sets and Knowledge Discovery.

There are some sad news for Pattern Recognition community associated with this edition of the conference. PReMI this year mourned the loss of its long-time mentor and even PReMI 2017 advisor, Professor Lotfi A. Zadeh who passed away while the preparation for the conference

was in full swing. A special session on Fuzzy sets was organized on the opening day dedicated to his memory. This edition of PReMI also happened to be the last one for our former Program and Organizing Chair, Prof C A Murthy, whose life was suddenly terminated by an unfortunate road accident just weeks after he chose the PReMI 2017 Best Paper Awards as the Chairman of Judges' Committee. With the close of this edition, PReMI bids farewell to these great contributors.

Overall, PReMI 2017 was a successful academic effort that nourished new scientific ideas and avenues of research and opened the gates of possible collaborations within and outside India.

Conference Proceedings



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Summary report:

The 2nd IAPR/IEEE Winter School on Biometrics was jointly organized by the Department of Computer Science, Hong Kong Baptist University, the Institute of Automation, Chinese Academy of Sciences, and College of Computer Science and Software Engineering, Shenzhen University, and co-sponsored by the IAPR, the IEEE, and Ping An Tech. Inc. The school was a training course to promote research in biometrics and related fields.

To consolidate the fundamental knowledge of biometrics and share

the latest biometric development, the program was designed to cover topics including fundamental concepts of different biometric modalities, mobile biometrics, anti-spoofing, and template protection. Based on advanced biometric technology, the main objective was to equip the participants with up-to-date biometric knowledge and provide an opportunity for the participants to develop their own personal and professional connections for future careers. The program included lectures, a poster session, a welcome reception, a gala dinner, and company visits.

Several subjects were taught at

the winter school, forming a total of 24 hours of lectures from 16 different lecturers who covered biometric identification with iris, face, gait, fingerprint, signature, security in biometric systems, deep learning and machine learning for biometrics, spoofing and anti-spoofing, multimodal biometrics and biometrics applications. The covered subjects were conducted by renowned experts from all over the world, selected from the editorial boards of top-level scientific journals and conferences. All lecturers presented the most up-to-date view in biometric data analysis.