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Preface

Welcome to the proceedings of the 2012 Chinese Conference on Pattern Recognition (CCPR 2012) in Beijing! The CCPR 2012 was the fifth in the series, following CCPR 2007 (Beijing), CCPR 2008 (Beijing), CCPR 2009 (Nanjing), and CCPR 2010 (Chongqing). From 2012, the CCPR will be held every other year, to be alternated with the Asian Conference on Pattern Recognition (ACPR), which was started in 2011.

In recent years, pattern recognition has increasingly become an enabling technology for many important and often mission-critical applications such as intelligent machines, data mining, business intelligence, Internet content search, public security monitoring, etc. The aim of CCPR is to provide a forum for scientific exchanges and exhibitions for pattern recognition researchers in China. CCPR in its current form was started in 2007 but the event can be dated back to the 1980s. In China, pattern recognition research commenced at the beginning of the 1970s. To cater for this fascinating area, the Chinese Association of Automation (CAA) formed a technical committee on Pattern Recognition and Machine Intelligence (PRMI) in 1979. This committee became an official member of the IAPR in 1981. In 1980, the First National Conference on Pattern Recognition and Machine Intelligence was organized, and these conferences were held seven times, until 1989.

As in the past, CCPR 2012 received regular submissions and invited internationally renowned researchers to give keynote speeches. By the deadline of May 30, we had received 137 full submissions. Each submission was reviewed by three reviewers selected from the program committee and other qualified researchers. Based on the reviewers' reports, 82 papers were accepted for presentation at the conference, covering diverse fields with 13 in pattern recognition theory, 17 in computer vision, 13 in biometric recognition, 9 in medical imaging, 10 in image and video analysis, 5 in document analysis, 8 in speech processing, and 7 in natural language processing and information retrieval.

We are grateful to the keynote speakers, Prof. Tomaso Poggio of Massachusetts Institute of Technology (USA) and Prof. Massimiliano Pontil of University College London (UK). They gave speeches titled "A New Theory of Invariant Recognition in Visual Cortex" and "Multi-task Learning: Theory and Practice", respectively. Thanks are due to the authors of all submitted papers, the program

committee members and the reviewers, and the staff of the organizing committee. Without their contribution, this conference would not have been a success. We are also grateful to Springer for publishing the proceedings, and especially to Ms Celine (Lanlan) Chang and Ms Leonie Kunz of Springer for their efforts and patience in collecting and editing the proceedings.

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