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Preface

In the medical field, personal medical feature data, especially digital images, can be referred to as medical biometrics. Such data are produced in ever-increasing quantities and used for diagnostics and therapy purposes. Medical biometric research aims to use personal medical features in different formats such as images, signals and other sources to solve medical problems and to provide high-performance services in the medical field. Medical biometric systems integrate multidisciplinary technologies in biology, medicine, electronics, computing, and statistics. The importance of computer-aided diagnosis and therapy has drawn more and more attention worldwide and laid the foundation for modern medicine with excellent potential for promising applications such as telemedicine and Web-based healthcare.

The 2010 International Conference on Medical Biometrics (ICMB 2010) placed emphasis on efficient and effective medical biometric technologies and systems. It provided a central forum for researchers, engineers and vendors from different disciplines to exchange the most recent results, identify future directions and challenges, and initiate possible collaborative research and system development. We are pleased that this conference attracted a large number of high-quality research papers that reflect the increasing interests and popularity in this fast-growing field. The conference proceedings contain 45 papers which were selected through a strict review process, with an acceptance rate at 38%. Each paper was assessed by three independent reviewers. All of the accepted papers were presented in either oral (20) or poster (25) sessions at the conference in conjunction with three special sessions on State-of-the-Art of Computer-Aided Detection/Diagnosis (CAD), Modernization of Traditional Chinese Medicine (TCM) and Effective Healthcare.

We would like to take this opportunity to thank the five keynote speakers for their inspiring talks at ICMB 2010 and sharing their valuable experience: Ching Suen, Yueting Zhang, Hiroshi Fujita, Bernd Fischer and Lianda Li. In addition, we would like to express our gratitude to all the contributors, reviewers, Program Committee and Organizing Committee members who made their contribution to the success of ICMB 2010 in different ways. Once again, we greatly appreciate the continuing support from the International Association of Pattern Recognition (IAPR), IEEE Computational Intelligence Society (IEEE-CIS), National Natural Science Foundation in China (NSFC), and Springer. Our special thanks also go to our working team Jane You, Xiaoyi Jiang, Prabir Bhattacharya, Lei Zhang, Zhenhua Guo, Xingzheng Wang, Dongmin Guo, Feng Liu, Qin Li and Yan Wu for their dedication and hard work on various aspects of this event. Last but not least, we sincerely wish that the fruitful technical interactions during this conference will benefit everyone concerned.

April 2010

David Zhang
Milan Sonka

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Table of Contents

Feature Extraction and Classification

Health Care

Medical Diagnosis

Medical Image Processing and Registration