

Preface

Bio-inspired computing is a field of study that abstracts computing ideas from living phenomena or biological systems. The ideas provide abundant inspiration for constructing high-performance computing models and intelligent algorithms, which relies heavily on the inter-discipline of biology, computer science, and mathematics.

Bio-Inspired Computing: Theories and Applications (BIC-TA) is a series of conferences that aims to bring together researchers working in the main areas of natural computing inspired from biology, for presenting their recent results, exchanging ideas, and cooperating in a friendly framework. The four main topics are evolutionary computing, neural computing, DNA computing, and membrane computing.

Since 2006, the conference has taken place at Wuhan (China, 2006), Zhengzhou (China, 2007), Adelaide (Australia, 2008), Beijing (China, 2009), Liverpool (UK, 2010) and Changsha (China, 2010), Penang (Malaysia, 2011), Gwalior (India, 2012), Huangshan (China, 2013), and Wuhan (China, 2014). Following the success of previous editions, the 10th International Conference on Bio-Inspired Computing: Theories and Applications (BIC-TA 2015) was organized by the University of Science and Technology of China, Huazhong University of Science and Technology, Anhui University, National University of Defense Technology, and the Special Committee of Information System and Management Science (System Engineering and Management Society of Hunan Province) in Hefei, China, during September 25–28, 2015.

BIC-TA 2015 attracted a wide spectrum of interesting research papers on various aspects of bio-inspired computing with a diverse range of theories and applications. We received 182 submissions and 63 papers were selected for this volume of *Communications in Computer and Information Science*.

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The editors warmly thank the Program Committee members for their prompt and efficient support in reviewing the papers, and the authors of the submitted papers for their interesting papers. Special thanks are due to Springer for the efficient cooperation in the timely production of this volume.

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