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# Information Technology in Bio- and Medical Informatics

Second International Conference, ITBAM 2011 Toulouse, France, August 31 - September 1, 2011 Proceedings



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## Preface

Biomedical engineering and medical informatics represent challenging and rapidly growing areas. Applications of information technology in these areas are of paramount importance. Building on the success of the first ITBAM that was held in 2010, the aim of the second ITBAM conference was to continue bringing together scientists, researchers and practitioners from different disciplines, namely, from mathematics, computer science, bioinformatics, biomedical engineering, medicine, biology, and different fields of life sciences, so they can present and discuss their research results in bioinformatics and medical informatics. We trust that ITBAM served as a platform for fruitful discussions between all attendees, where participants could exchange their recent results, identify future directions and challenges, initiate possible collaborative research and develop common languages for solving problems in the realm of biomedical engineering, bioinformatics and medical informatics. The importance of computer-aided diagnosis and therapy continues to draw attention worldwide and has laid the foundations for modern medicine with excellent potential for promising applications in a variety of fields, such as telemedicine, Web-based healthcare, analysis of genetic information and personalized medicine.

Following a thorough peer-review process, we selected 13 long papers and 5 short papers for the second annual ITBAM conference. The Organizing Committee would like to thank the reviewers for their excellent job. The articles can be found in these proceedings and are divided into the following sections: decision support and data management in biomedicine; medical data mining and information retrieval; workflow management and decision support in medicine; classification in bioinformatics; data mining in bioinformatics. The papers show how broad the spectrum of topics in applications of information technology to biomedical engineering and medical informatics is.

The editors would like to thank all the participants for their high-quality contributions and Springer for publishing the proceedings of this conference. Once again, our special thanks go to Gabriela Wagner for her hard work on various aspects of this event.

June 2011

Christian Böhm Sami Khuri Lenka Lhotská Nadia Pisanti

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