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Advances in Intelligent and Soft Computing

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and Juan Manuel Corchado (Eds.)

Advances in Bioinformatics

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Applications of Computational Biology
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Preface

The fields of Bioinformatics and Computational Biology have been growing steadily over the last few years boosted by an increasing need for computational techniques that can efficiently handle the huge amounts of data produced by the new experimental techniques in Biology. This calls for new algorithms and approaches from fields such as Data Integration, Statistics, Data Mining, Machine Learning, Optimization, Computer Science and Artificial Intelligence.

Also, new global approaches, such as Systems Biology, have been emerging replacing the reductionist view that dominated biological research in the last decades. Indeed, Biology is more and more a science of information needing tools from the information technology field. The interaction of researchers from different scientific fields is, more than ever, of foremost importance and we hope this event will contribute to this effort.

IWPACBB'10 technical program included a total of 30 papers (26 long papers and 4 short papers) spanning many different sub-fields in Bioinformatics and Computational Biology. Therefore, the technical program of the conference will certainly be diverse, challenging and will promote the interaction among computer scientists, mathematicians, biologists and other researchers.

We would like to thank all the contributing authors, as well as the members of the Program Committee and the Organizing Committee for their hard and highly valuable work. Their work has helped to contribute to the success of the IWAPCBB'10 event. IWPACBB'10 wouldn't exist without your contribution.

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