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Biomedical Engineering Systems and Technologies

10th International Joint Conference, BIOSTEC 2017
Porto, Portugal, February 21–23, 2017
Revised Selected Papers

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Preface

The present book includes extended and revised versions of a set of selected papers from the 10th International Joint Conference on Biomedical Engineering Systems and Technologies (BIOSTEC 2017), held in Porto, Portugal, during February 21–23, 2017. BIOSTEC is composed of five co-located conferences, each specialized in a different knowledge area, namely, BIODEVICES, BIOIMAGING, BIOINFORMATICS, BIOSIGNALS, and HEALTHINF.

BIOSTEC 2017 received 297 paper submissions from 56 countries, of which only 6% are included in this book. This reflects our care in selecting contributions. These papers were selected by the conference chairs on the basis of a number of criteria that include the classifications and comments provided by the Program Committee members, the session chairs' assessment, and the program chairs' meta-review of the papers that were included in the technical program. The authors of selected papers were invited to submit a revised, extended, and improved version of their conference paper, including at least 30% new material.

The purpose of the BIOSTEC joint conferences is to bring together researchers and practitioners, including engineers, biologists, health professionals, and informatics/computer scientists. Research presented at BIOSTEC included both theoretical advances and applications of information systems, artificial intelligence, signal processing, electronics, and other engineering tools in areas related to advancing biomedical research and improving health care.

The papers included in this book contribute to the understanding of relevant research trends in biomedical engineering systems and technologies. As such, they provide an overview of the field's current state of the art.

We thank the authors for their contributions and Monica Saramago for process management. In particular, we express our gratitude to the reviewers, who helped to ensure the quality of this publication.

February 2017

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