

# Preface

Dear Readers,

We introduce to you a series of carefully selected papers presented during the 8th KES International Conference on Intelligent Interactive Multimedia Systems and Services (IIMSS-15).

At a time when computers are more widespread than ever and computer users range from highly qualified scientists to non-computer expert professionals, Intelligent Interactive Systems are becoming a necessity in modern computer systems. The solution of “one-fits-all” is no longer applicable to wide ranges of users of various backgrounds and needs. Therefore, one important goal of many intelligent interactive systems is dynamic personalization and adaptivity to users. Multimedia Systems refer to the coordinated storage, processing, transmission, and retrieval of multiple forms of information, such as audio, image, video, animation, graphics, and text. The growth rate of multimedia services has become explosive, as technological progress matches consumer needs for content.

The IIMSS-15 conference took place as part of the Smart Digital Futures 2015 multi-theme conference, which groups AMSTA-15, IDT-15 and SEEL-15 with IIMSS-15 in one venue. It was a forum for researchers and scientists to share work and experiences on intelligent interactive systems and on multimedia systems and services. It included a general track and three invited sessions.

The general track (pp. 1–140) focuses on issues ranging from intelligent image or video storage, retrieval, transmission, and analysis, to knowledge technologies and smart, knowledge-based applications. The invited session “Intelligent Video Processing and Transmission Systems” (pp. 141–250) specifically focuses on functionalities and architectures of systems for video processing and transmission. The invited session “Autonomous System” (pp. 251–312) considers issues such as ethical, legislation, and regulatory matters for what concerns mobile robots and autonomous systems. Finally, the invited session “Innovative Information Services for Advanced Knowledge Activity” (pp. 313–378) focuses on advanced functionalities for information and knowledge-based services.

Our gratitude goes to many people who have greatly contributed to putting together a fine scientific program and exciting social events for IIMSS 2015. We acknowledge the commitment and hard work of the program chairs and of the invited session organizers. They have kept the scientific program in focus and made the discussions interesting and valuable. We recognize the excellent job done by the program committee members and the extra reviewers. They evaluated all the papers on a very tight time schedule. We are grateful for their dedication and contributions. We could not have done it without them. More importantly, we thank the authors for submitting and trusting their work to the IIMSS conference.

We hope that readers will find in this book an interesting source of knowledge in fundamental and applied facets of intelligent interactive multimedia and, maybe, even some motivation for further research.

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Intelligent Interactive Multimedia Systems and Services

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G. (Eds.)

2015, XIV, 380 p. 171 illus., Hardcover

ISBN: 978-3-319-19829-3