

# Preface

The term *Multimedia Services* is used when referring to services that make use of coordinated and secure storage, processing, transmission, and retrieval of information which exists in various forms. From its nature, the term *Multimedia Services* includes several levels of data processing and applies to such diverse areas as digital libraries, e-learning, e-government, e-commerce, e-entertainment, e-health, and e-legal services, as well as to their mobile counterparts (i.e., *m-services*). Our society is characterized by a constant demand for new and more sophisticated multimedia services. This demand constantly poses new challenges for advanced processing at all levels.

Over the past few years, an attempt was made to follow recent advances in a series of edited books on multimedia services in intelligent environments. The volume at hand is the sixth volume on the topic. In our previous books [1–5], we covered various aspects of processing in multimedia services.

More specifically, in [1] we were concerned mostly with low level data processing in multimedia services in intelligent environments. In [2], we were concerned with various software development challenges and related solutions that arise when attempting to accommodate multimedia services in intelligent environments. In [3], we presented various integrated systems that were developed to accommodate multimedia services in intelligent environments. In [4], we were concerned with a special class of software systems, known as *Recommender Systems*. Finally, in [5], a specific class of multimedia services was addressed and presented, which are called *Recommendation Services*.

In the current volume, we present some specific multimedia systems that have been developed and applied *in practice*. Such multimedia systems are important not only in their own, but also in that they highlight various difficulties that may arise when developing practical multimedia and, thus, provide practical solutions applicable to other multimedia development projects as well.

More specifically, the book at hand consists of an editorial and seven chapters. All chapters in the book have evolved as extended versions of selected papers presented in the *6th International Conference on Intelligent Interactive Multimedia*

*Systems and Services (KES IIMSS 2013)*, Sesimbra, Portugal, June 26–28, 2013. The chapters in the book are as follows:

Chapter 1 introduces the research area and presents a brief abstract of each chapter included in the book. Chapter 2 is on “On the Use of Multi-attribute Decision Making for Combining Audio-Lingual and Visual-Facial Modalities in Emotion Recognition.” Chapter 3 is on “Cooperative Learning Assisted by Automatic Classification within Social Networking Services.” Chapter 4 is on “Improving Peer-to-Peer Communication in e-Learning by Development of an Advanced Messaging System.” Chapter 5 is on “Fuzzy-Based Digital Video Stabilization in Static Scenes.” Chapter 6 is on “Development of Architecture, Information Archive and Multimedia Formats for Digital e-Libraries.” Finally, Chapter 7 is on “Layered Ontological Image for Intelligent Interaction to Extend User Capabilities on Multimedia Systems in a Folksonomy Driven Environment.”

As societal demand drives multimedia services in intelligent environments to become increasingly more sophisticated, as new challenges arise which require ever more efficient tools, methodologies, and integrated systems to be devised, and as the application areas of multimedia services continue to expand at an explosive rate, the entire field of multimedia services in intelligent environments cannot be effectively covered in the six volumes published so far. Thus, it may be expected that additional volumes on other aspects of multimedia services in intelligent environments will appear in the future.

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