

Preface

This book comprises invited surveys and a selection of revised contributions that were initially submitted to the 10th International Workshop on Adaptive Multimedia Retrieval (AMR 2012). This time, the workshop was organized at the Royal School of Library and Information Science in Copenhagen, Denmark, during October 24–25, 2012.

Systems for searching and organizing multimedia information have matured during the last few years. However, retrieving specific media objects is still a challenging task, especially if the query can only be vaguely defined or refers to different types of media. The main difficulties in multimedia search are still, on the one hand, the users' incapacity in specifying their interests in the form of a well-defined query due to insufficient support from the interface, and on the other hand, the problem of extracting relevant (semantic) features from the multimedia objects itself. Ideally, user-specific interests should also be considered when ranking or automatically organizing result sets. To improve today's retrieval tools and thus the overall satisfaction of a user, it is necessary to develop advanced techniques able to support the user in the interactive retrieval process. The general goal of the AMR workshops is to promote the exchange of ideas between the different research communities involved in this topic.

This book includes contributions ranging from theoretical work to practical implementations and its evaluation. Moreover, it is a combination of state-of-the-art surveys and focused contributions. The first part of the book includes overview chapters covering three important aspects of adaptive multimedia retrieval challenges: The first chapter focuses on discovery based on language, the second on evaluation in the particular case of music retrieval, and the third on concepts of recommender systems. All chapters provide a fundamental introduction to the general concepts and the state of the art in these fields.

In the submitted contributions to the workshop three main topics emerged. The first topic is the recurring issue of semantics when dealing with multimedia data. Several papers address the problem of how to annotate images or audio. Furthermore, a lot of work is still tackling issues of feature extraction, data and source identification, and classification, which are important tasks to iteratively close the gap between low-level features and high-level semantics.

The second important topic that emerged is the exploitation of the context for improved retrieval. A good example of this are approaches exploiting location information. Other important aspects explored in these works are the type of media (music, image, natural language text) and the source of data (e.g., the crowd). The context also plays an important role in the contributions presenting recent work on facets of human computer interfaces.

Finally, the crucial problem of (dynamic) adaptation is addressed by the majority of papers. The quantity and diversity of these papers reflect the importance of the topic and its transversality. Adaptation can be understood based on two aspects: What is

being modified and what it is based on? The multiplicity of crossing of these two objects of interest, treated in this book, make us believe that it is still a great ground for ongoing cross-fertilization of the research fields involved.

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