Lecture Notes in Computer Science 6535

Commenced Publication in 1973
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Adaptive Multimedia Retrieval

Understanding Media and Adapting to the User

7th International Workshop, AMR 2009
Madrid, Spain, September 24-25, 2009
Revised Selected Papers

Springer

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ISSN 0302-9743 e-ISSN 1611-3349
ISBN 978-3-642-18448-2 e-ISBN 978-3-642-18449-9
DOI 10.1007/978-3-642-18449-9
Springer Heidelberg Dordrecht London New York

Library of Congress Control Number: 2010942865

CR Subject Classification (1998): H.4, H.3, I.4, H.5.1, H.5, I.2, H.2

LNCS Sublibrary: SL 3 – Information Systems and Application, incl. Internet/Web and HCI

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Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

Preface

This book contains a selection of the revised contributions that were initially submitted to the International Workshop on Adaptive Multimedia Retrieval (AMR 2009). The workshop was organized by the Universidad Nacional de Educación a Distancia (UNED) in Madrid, Spain, during September 24–25, 2009.

The goal of the AMR workshops is to intensify the exchange of ideas between the different research communities involved in this topic, in particular those focusing on multimedia retrieval, human–computer interaction, machine learning and artificial intelligence, to provide an overview of current activities in their areas of expertise and to point out connections between them. In this spirit, the first three events were collocated with artificial intelligence-related conferences: in 2003 as a workshop of the German Conference on Artificial Intelligence (KI 2003); in the following year as part of the European Conference on Artificial Intelligence (ECAI 2004) and in 2005 co-located with the International Joint Conference on Artificial Intelligence (IJCAI 2005). Because of its success, in 2006 the University of Geneva, Switzerland, organized the workshop for the first time as a standalone event; and since then it has been so: AMR 2007 was organized by the Laboratoire d'Informatique de Paris VI (LIP6) in France and AMR 2008 by the Fraunhofer Institute for Telecommunications, Heinrich Hertz Institute (HHI) in Berlin.

In 2009 the workshop presented a multitude of ideas around two main topics: understanding the media content and adapting to the user. The diversity of aspects covered – ranging from theoretical work to practical implementations – provides a very rich and complementary set of perspectives. In the revised contributions contained in this edition the authors propose different ways to 'understand' medias as diverse as images, music, spoken audio and videos. *Understanding* is tackled by contributions that take small steps to reduce the semantic gap, e.g., by what one of the authors called 'pre-semantic features.' Further contributions focus on *describing* images, on *identifying* musical notes or spoken words, and on *summarizing* video content.

Adapting to the user was tackled from a variety of points of view. The object (to be adapted) ranged from the underlying similarity, over the type of interaction (e.g., browsing vs. querying), to the content to be presented (e.g., video summaries). Information about the user was collected with a variety of techniques, as for instance feedback or log analysis. Finally, all these challenges are linked and put into perspective in the special contribution of the invited speaker, which addresses the mining of networked media collections.

We believe that the above trends are representative and thus this book provides a good and conclusive overview of the current research in the area of adaptive multimedia retrieval. We would like to thank all members of the Program Committee for supporting us in the reviewing process, the workshop participants

for their willingness to revise and extend their papers for this book, the sponsors for their financial help and Alfred Hofmann from Springer for his support in the publishing process.

August 2010

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