

## *Preface*

This volume comprises papers from the following three workshops that were part of the complete program for the International Conference on Extending Database Technology (EDBT) held in Prague, Czech Republic, in March 2002:

- XML-Based Data Management (XMLDM)
- Second International Workshop on Multimedia Data and Document Engineering (MDDE)
- Young Researchers Workshop (YRWS)

Together, the three workshops featured 48 high-quality papers selected from approximately 130 submissions. It was, therefore, difficult to decide on the papers that were to be accepted for presentation. We believe that the accepted papers substantially contribute to their particular fields of research. The workshops were an excellent basis for intense and highly fruitful discussions. The quality and quantity of papers show that the areas of interest for the workshops are highly active. A large number of excellent researchers are working in relevant fields producing research output that is not only of interest to other researchers but also for industry. The organizers and participants of the workshops were highly satisfied with the output. The high quality of the presenters and workshop participants contributed to the success of each workshop. The amazing environment of Prague and the location of the EDBT conference also contributed to the overall success. Last, but not least, our sincere thanks to the conference organizers – the organizing team was always willing to help and if there were things that did not work, assistance was quickly available.

Based on the reviews and discussions during the workshops, 43 authors were invited to submit improved and extended versions of their papers for these LNCS proceedings. When revising their papers, authors were asked to consider not only the comments of the reviewers but also the comments of other workshops participants.

### **XML-Based Data Management (XMLDM)**

Modern database systems enhance the capabilities of traditional database systems through their ability to handle any kind of data, including text, image, audio, and video, and to provide access to these data via SQL-like query languages. They do so by exploiting object-orientation to various extents. Today, database systems are particularly relevant to the Web, as they can provide input to content generators for Web pages, and can handle queries issued over the Internet. As database systems increasingly start talking to each other over the Web, there is a fast-growing interest in using the eXtensible Markup-Language (XML) as the standard exchange format. As a result, many relational database systems can export data as XML documents and import data from XML documents. XML is on its way to becoming the communication standard of the Web. With this there is an increasing trend to store XML data in database systems to make it easier to access and maintain them. A number of commercial database systems are already on the market that are especially tailored to store, maintain, and easily access XML documents.

*Workshop Program Committee:*

Wolfgang Benn, TU Chemnitz (Germany)  
Elisa Bertino, University of Milan (Italy)  
Ronald Bourret, Independent Consultant (USA)  
Stephane Bressan, National University of Singapore (Singapore)  
Robert Brunner, Caltech (USA)  
Akmal B. Chaudhri, IBM developerWorks (USA)  
Anthony Coates, Reuters (UK)  
Giovanna Guerrini, University of Pisa (Italy)  
Mario Jeckle, DaimlerChrysler AG (Germany)  
Christian Jensen, Aalborg University (Denmark)  
Alfons Kemper, University of Passau (Germany)  
Meike Klettke, University of Rostock (Germany)  
Ingo Macherius, FhG-IPSI (Germany)  
Christian Och, Synerva GmbH (Germany)  
Richard Osborne, University of Colorado (USA)  
Erhard Rahm, University of Leipzig (Germany)  
Awais Rashid, Lancaster University (UK)  
Harald Schoening, Software AG (Germany)  
Jamie Shiers, CERN (Switzerland)  
Zahir Tari, Royal Melbourne Institute of Technology (Australia)  
Mihaela Ulieru, University of Calgary (Canada)  
Rainer Unland, University of Essen (Germany)  
Gottfried Vossen, University of Muenster (Germany)

Our thanks also to the following additional reviewers:

Oliver Langer, TU Chemnitz (Germany)  
Marco Mesiti, University of Genoa (Italy)  
Frank Seifert, TU Chemnitz (Germany)

**Multimedia Data and Document Engineering (MDDE)**

MDDE brought together experts from all fields of multimedia and document engineering, including experts in databases, documents engineering, digital media content analysis, data mining, and domain experts from diverse applied disciplines with potential in multimedia data and document engineering. More particularly, the workshop addressed the following questions:

- What are the problems and the applications addressed by multimedia document engineering?
- What are the advanced architectures of multimedia documents?
- What are the specific issues raised in knowledge extraction from within documents composed of image, sound, and video?
- What are suitable representations and formats that can help multimedia document management?
- How can database technology and existing data mining techniques be adapted and enhanced to multimedia data that are complex (spatial and temporal features) and not structured, in order to support knowledge discovery techniques in multimedia documents?

*Workshop Program Committee:*

Michel Adiba, LSR, IMAG (France)  
 Marie-Aude Aaufaure-Portier, INRIA (France)  
 Omar Boussaid, Lyon 2 University (France)  
 Alberto Del Bimbo, Florence University (Italy)  
 Chabane Djeraba, IRIN, Polytech Nantes (France)  
 Jianping Fan, Charlotte North Carolina University (USA)  
 Elena Ferrari, Milano University (Italy)  
 William Grosky, Michigan Dearborn University (USA)  
 Manfred Jeusfeld, Tilburg University (The Netherlands)  
 Rob Koenen, InterTrust Technologies Corporation (The Netherlands)  
 Jaroslav Pokorny, Charles University (Czech Republic)  
 Vaclav Snasel, VSB-Technical University of Ostrava (Czech Republic)  
 Farouk Toumani, Blaise Pascal University (France)  
 Osmar Zaiane, Alberta University (Canada)  
 Aidong Zhang, Buffalo University (USA)

**Young Researchers Workshop (YRWS)**

The EDBT PhD Workshop once again brought together Ph.D. students in the field of database technology outside the EDBT conference series. It offers the Ph.D. students the opportunity to present, discuss, and receive feedback on their research in a constructive and international environment.

*Workshop Program Committee:*

Sibel Adali (USA)  
 Elisa Bertino (Italy)  
 Stefan Brass (Germany)  
 Wojciech Cellary (Poland)  
 Stefan Conrad (Germany)  
 Stefan Dessloch (USA)  
 Piero Fraternali (Italy)  
 Theo Haerder (Germany)  
 Andreas Heuer (Germany)  
 Holger Meyer (Germany)  
 Leonid Kalinichenko (Russia)  
 Yasushi Kiyoki (Japan)  
 Wolfgang Klas (Austria)  
 M. Tamer Ozsu (Canada)  
 Jaroslav Pokorny (Czech Republic)  
 Tore Risch (Sweden)  
 Norbert Ritter (Germany)  
 Ingo Schmitt (Germany)  
 Marc H. Scholl (Germany)  
 Timos Sellis (Greece)  
 Srinath Srinivasa (India)  
 Július Stuller (Czech Republic)  
 Bernhard Thalheim (Germany)  
 Robert Wrembel (Poland)

We would sincerely like to thank all program committee members, as well as all external referees for their excellent work in evaluating the submitted papers. Moreover, we would like to thank Mr. Hofmann from Springer-Verlag for his cooperation and help in putting this volume together.

Essen, August 2002

Akmal B. Chaudhri, Rainer Unland  
(Program Co-chairs XMLDM)  
Chabane Djeraba (Program Chair MDDE)  
Wolfgang Lindner (Program Chair YRWS)