

**Johann Eder  
Maria Bielikova  
A Min Tjoa (Eds.)**

# **ADBIS 2011**

## **Research Communications**

**The 15<sup>th</sup> East European Conference on  
Advances in Databases and Information Systems  
Vienna, Austria, September 20-23, 2011**

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Johann Eder Maria Bielikova A Min Tjoa (eds.)

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Proceedings II of the  
15<sup>th</sup> East-European Conference on  
Advances in Databases  
and Information Systems

September 20 – 23, 2011, Vienna

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## Volume Editors

Johann Eder  
Alpen Adria Universität Klagenfurt  
Institut für Informatik-Systeme  
Universitätsstr. 65, 9020 Klagenfurt, Austria  
E-mail: johann.eder@aau.at

Maria Bielikova  
Slovak University of Technology in Bratislava  
Faculty of Informatics and Information Technologies  
Ilkovicova 3, 842 16 Bratislava, Slovakia  
E-mail: maria.bielikova@stuba.sk

A Min Tjoa  
Technische Universität Wien  
Institut für Softwaretechnik und Interaktive Systeme  
Favoritenstr. 9 - 11/188, 1040 Wien, Austria  
Email: amin@ifs.tuwien.ac.at

## Doctoral Consortium Section Editors

Boris Novikov  
St.Petersburg University  
Dept. of Computer Science  
7-9, Universitetskaya nab., St. Petersburg, 199034, Russia  
E-mail: borisnov@acm.org

Rainer Manthey  
Universität Bonn  
Institut für Informatik III  
Römerstr. 164, 53117 Bonn, Germany  
E-mail: manthey@informatik.uni-bonn.de

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## Preface

The main objective of the ADBIS series of conferences is to provide a highly visible forum for the dissemination of research accomplishments and to promote interactions and collaborations among the database and information systems research communities from Central and Eastern European countries and with the rest of the world. The ADBIS conferences provide an international platform for the presentation of research on database theory, information systems, advanced DBMS technologies, and their advanced applications.

ADBIS 2011 was the 15th instantiation of this series. It took place in Vienna, Austria, September 20-23, 2011, organized by the Institute for Software Technology of the University of Technology Vienna. ADBIS 2011 continued the ADBIS series held in St. Petersburg (1997), Poznan (1998), Maribor (1999), Prague (2000), Vilnius (2001), Bratislava (2002), Dresden (2003), Budapest (2004), Tallinn (2005), Thessaloniki (2006), Varna (2007), Pori (2008), Riga (2009), and Novi Sad (2010).

The call for papers had attracted 105 submissions from 31 countries. The thorough reviewing process – each paper was reviewed by three to five members of the Program Committee – was highly competitive. These ADBIS Research Communications Proceedings contain the 22 short papers which have been accepted by the international program committee in addition to the regular papers. Short papers have the mission to support the rapid dissemination of novel ideas and concepts.

In addition, these proceedings also include a section edited by Boris Novikov and Rainer Manthey containing six papers accepted for the Doctoral Consortium, a special track within the ADBIS conference specifically targeted to PhD students to present their thesis proposals and first results and to receive valuable feedback and comments by experienced and renowned researchers and academic teachers.

We express our sincere gratitude to all those who made ADBIS 2011 possible by generously and voluntarily sharing their knowledge, skills and time: the Local Organization chair Amirreza “Nick” Tahamtan for providing an excellent environment for the conference, the Austrian Computer Society for their help in all organizational matters, and all other colleagues holding offices. In particular, we thank the program committee members as well as the additional reviewers for devoting their expertise and time to ensure the high quality of the conference in an extensive review and discussion process. Special thanks also go to Katja Unteröfler for carefully making these proceedings ready for print. And last but not least, we are grateful to all the authors who showed their appreciation of the conference by submitting their valuable work.

Klagenfurt, Bratislava, Vienna, September 2011

Johann Eder  
Maria Bielikova  
A Min Tjoa

## Preface

### Doctoral Consortium Section

The ADBIS 2011 Doctoral Consortium was organized in the form of a workshop that addresses PhD students who have already identified a dissertation topic and are reasonably far advanced in their work, but not yet close to finishing their thesis. We aimed at providing attendees with a welcoming atmosphere to present their research, to receive useful feedback from well known professors and researchers, and to exchange ideas and experiences with PhD students from other countries.

At the same time, participants of the PhD event had the opportunity to attend sessions of the ADBIS conference and to meet more experienced colleagues from other parts of the world in an environment where it is easy to establish personal contact.

The ADBIS 2011 DC program included 6 presentations by students from Austria, Canada, Czech Republic, France, and Russia. The topics range from top k index structures and performance issues to data warehouse evolution, information integration and natural language processing.

Bonn, St.Petersburg, September 2011

Rainer Manthey  
Boris Novikov

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