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Dataspace: The Final Frontier

26th British National Conference on Databases, BNCOD 26
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Proceedings



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Preface

This volume contains the proceedings of the 26th British National Conference on Databases (BNCOD 2009) held in July 2009 at the University of Birmingham. The theme of the conference was “Dataspace: The Final Frontier,” a topic that only recently rose to attention and shows promise of crystallizing many disparate research threads into a new unified vision for the future of databases.

We were very grateful to have Michael Franklin of the University of California, Berkeley, USA, and Domenico Laforenza of the Italian National Research Council (CNR) give the keynote speeches of the conference. Michael is one of the originators of the dataspace concept, and brought us up to date with current developments and future directions in the field in his opening keynote address. Domenico is one of the leading figures in the world on the topic of grid computing, an area that is tackling some of the major issues of management and manipulation of enormous amounts of data. In his closing keynote talk, he presented XtreemOS, a European project on developing an operating system platform for grid computing.

In a new departure for BNCOD, this year we held two tutorials. The first, continuing the theme of dataspaces, was presented by Jens Dittrich of Saarland University, Saarbrücken, Germany, in which he presented iMeMex, one of the first dataspace management systems. System design concepts, dataspace modelling, dataspace indexing, dataspace query processing, and pay-as-you-go information integration were all discussed and important lessons learnt in the project as well as open research challenges were presented. The second tutorial was given by Wenfei Fan, Floris Geerts and Xibei Jia of the University of Edinburgh, UK. Their presentation was on a practical, effective and theoretically well-founded approach, based on conditional dependencies, for detecting and repairing errors in real-life data.

Three satellite workshops were co-located with BNCOD 2009: the 7th International Workshop on Teaching, Learning and Assessment of Databases (TLAD 2009), is a regular associate of BNCOD. New friends this year were the 4th International Workshop on Ubiquitous Computing (iUBICOM 2009) and the First International Workshop on Database Architectures for the Internet of Things (DAIT 2009). A summary/review paper for each of the three workshops is included in these proceedings.

The PhD Forum is a regular event at BNCOD and this year was no exception. PhD students presented the current state of their work to an expert panel who were able to offer helpful advice and guidance. Invited talks at the forum presented different views of how to survive the PhD process and make a career in academia.

There were 33 submissions to BNCOD 2009 from 12 countries. Each submission was blind reviewed by at least three Programme Committee members.

The Programme Committee decided to accept 12 full, 2 short and 5 poster papers. All accepted papers are reproduced in these proceedings, with the full papers divided into four sections: “Data Integration, Warehousing and Privacy,” “Alternative Data Models,” “Querying,” and “Path Queries and XML.”

I would particularly like to thank the keynote and tutorial speakers for their contributions, the authors for submitting their papers, the Programme Committee for their reviews, the Organizing Committee for the great effort they contributed, the BNCOD Steering Committee, who were always on hand with helpful advice, the EasyChair conference management system, which hugely simplified much of the work involved in organizing the conference, and, last, but by no means least, all the attendees who form the community that makes this conference such an enjoyable and worthwhile event each year.

May 2009

Alan P. Sexton

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