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Deductive and Object-Oriented Databases

Second International Conference, DOOD'91 Munich, Germany, December 16-18, 1991 Proceedings



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Preface

This volume is the Proceedings of the Second International Conference on Deductive and Object-Oriented Databases. During the last decade, deductive and object-oriented systems have received a great deal of attention, but for the most part these two fields were evolving independently of each other. Today there is a large body of work suggesting that the deductive and object-oriented paradigms are not mutually exclusive but, in fact, complementary.

The object-oriented paradigm is characterized by its view of the data, whereby information is grouped around objects with complex internal structure accessed via methods. The declarative paradigm, on the other hand, is centered around a philosophy of data manipulation, namely, around the idea that this manipulation must be done through a declarative, logic-based language. It is hoped that these two aspects, brought together in one system, will provide an integrated framework for a new database technology. The aim of this conference is to bring together researchers and developers in the fields of deductive and object-oriented databases to stimulate the technical discussion and accelerate the process of integration of the two promising technologies.

This volume contains 28 contributed papers and two invited papers that were presented at the conference. The contributed papers were selected out of 94 submissions by a highly competitive process, based on referee reports and discussions among members of the Program Committee. The Program Committee would like to thank all those who chose to submit their works to this conference and all those who contributed their time by reviewing the submissions. Special thanks goes to Rainer Manthey who coordinated the work of the three geographically remote parts of the Program Committee.

December 1991

Claude Delobel Michael Kifer Yoshifumi Masunaga

Message of the General Conference Chairperson

It has been our great pleasure to have this Second International Conference on Deductive and Object-Oriented Databases - DOOD'91 - in Munich, this marvellous town at the heart of Europe where I left part of my heart one year ago. The success of the first DOOD conference that was held in Kyoto, Japan in December 1989 encouraged us to continue our effort in bringing together scientists working on two of the most active topics in database research, favoring integration of these two disciplines that may lead (there is good evidence for that) to industrial DOOD systems by the mid-1990s. The quality of the papers that were submitted and the number of participants at DOOD'91 constitute a nice reward for this effort.

It was a great honor that Prof. Heinz Schwärtzel, as Executive Committee Chairperson and President of the "Gesellschaft für Informatik" (GI), and Dr. Hervé Gallaire, as President of the "Association for Logic Programming" (ALP), have accepted to welcome with me the participants of this conference. I would like to express my sincere thanks to them.

The scientific quality of the conference is the result of a difficult and careful review and selection process that has been conducted by the three program committees, with the help of external reviewers, under the chairmanship of Prof. Claude Delobel, Prof. Michael Kifer and Prof. Yoshifumi Masunaga. I would like to express my deep appreciation to them and to the authors for the 28 high quality papers, addressing a wide and representative range of topics within DOOD which were presented at the conference. Along with these presentations, two invited talks were given by Prof. Jeffrey Ullman and Prof. Malcom Atkinson. I want to thank them again here, first to have accepted to serve as invited speakers and second for their excellent talks.

Like all the participants, I believe, I have personally deeply appreciated and enjoyed the social events associated with the conference. Thanks to the hospitality of the Municipality of Munich and of its Mayor, the heartiest welcomes awaited-us at the reception in the historic rooms of the Old City Hall. At the conference banquet, Prof. David Stemple gave us a very entertaining speech full of humour which I will never forget. I would like to express my sincere thanks to them as well.

A conference like DOOD can only become a success if many people devote their talents and time. I am particularly thankful to Mr. Helmuth Benesch and Dr. Rainer Manthey, co-chairpersons of the organizing committee, to Mr. Peter Gotzmann the treasurer and to their colleagues for all the worthy effort they have put into the organization. Thanks also to Prof. Gérard Comyn, current director of ECRC for his support.

Finally, I would like to express my gratitude to my colleagues of the DOOD Steering Committee, in particular its chairman Prof. Jack Minker for giving us the opportunity to organize the second DOOD conference. Since the beginning we have aimed at emphasizing the international spirit of this conference by working with three regional program committees - in America, Europe, and the Far-East - and by organizing it in each of the three regions in turn on a biennial basis. I will conclude this message by wishing all the best to DOOD'93 to be held in Phoenix, USA.

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Contents

Query Processing I
Optimization of Nonrecursive Queries in OODBs
Optimization of Methods in a Navigational Query Language
Query Processing II
Execution Plan Generation for an Object-Oriented Data Model
Efficient Access Methods in Deductive and Object-Oriented Databases
Language Semantics
Semantics of Disjunctive Logic Programs and Deductive Databases
G-Log: A Declarative Graphical Query Language
Nondeterminism in Deductive Databases
Updates I
Declarative Specification and Evaluation of Database Updates
Schema Updates and Consistency
Updatable Views in Object-Oriented Databases

Query Evaluation and Complexity

Syntactic Characterizations of 1-Bounded Datalog Programs	208
Evaluation and Optimization of Complex Object Selections	226
On Testing Effective Computability of Magic Programs	244
Invited Talk I	
A Comparison of Deductive and Object-Oriented Database Systems	263
Constraints and Dependencies	
Updating Deductive Databases with Functional Dependencies	278
Constraints in an Object-Oriented Deductive Database	292
Path Constraints for Graph-Based Data Models: Towards a Unified Theory of Typing Constraints, Equations, and Func- tional Dependencies	312
Data Modelling Concepts	
Providing Dynamic Type Abstractions and Specifications for Persistent Information	332
Multidimensional Versioning for Object-Oriented Databases	355
On Canonical and Non-Canonical Classifications	371

Formalization of Object-Oriented Concepts

DOT: A Term Representation Using DOT Algebra for Knowledge-bases	391
M. Tsukamoto, S. Nishio, M. Fujio	4 01
Semantics of Inheritance in Logical Object Specifications	411
A Formalization of Objects Using Equational Dynamic Logic	431
Invited Talk II	
A Vision of Persistent Systems	453
Updates II	
From Relational to Object-Oriented Integrity Simplification	460
On the Efficient Computation of the Difference Between Consecutive Database States	478
Set-Oriented Propagation of Updates into Transitively Closed Relations	503
Query Languages	
Querying Design and Planning Databases T. Imielinski, S. Naqvi, K. Vadaparty	524
A Generalized Information Resource Query Language and Basic Query Evaluation Technique	546
An Extensible Functional Query Language for an Object-Oriented Database System	567
O. Boucelma, J. Le Maitre	