

Lecture Notes in Computer Science

645

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Entity-Relationship Approach – ER '92

11th International Conference
on the Entity-Relationship Approach
Karlsruhe, Germany, October 7-9, 1992
Proceedings

Springer-Verlag

Berlin Heidelberg New York
London Paris Tokyo
Hong Kong Barcelona
Budapest

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CR Subject Classification (1991): H.2, H.1.0, H.3.3, H.4, H.5.2

ISBN 3-540-56023-8 Springer-Verlag Berlin Heidelberg New York
ISBN 0-387-56023-8 Springer-Verlag New York Berlin Heidelberg

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© Springer-Verlag Berlin Heidelberg 1992
Printed in Germany

Typesetting: Camera ready by author/editor
Printing and binding: Druckhaus Beltz, Hemsbach/Bergstr.
45/3140-543210 - Printed on acid-free paper

Foreword

Over the past fifteen years the Entity-Relationship Approach has evolved as an almost *de facto* standard for conceptual and logical design of databases and information systems. Continuing the tradition, the Eleventh International Conference on the Entity-Relationship Approach held in Karlsruhe, Germany, October 7-9, 1992, was organized to bring together researchers and practitioners to share ideas, encourage research and new developments, and raise issues related to the ER Approach.

The proceedings of the ER'92 conference contain the text of all the papers that were selected by the Program Committee and of the invited papers by leading experts in the field. To maintain the high technical quality of the conference all submitted papers went through an intensive review process. Out of the sixty-four submissions taken into consideration, twenty-two papers were selected for inclusion in the program. Technical quality, originality, significance, and clarity of presentation were the major criteria used in evaluating the papers.

The accepted papers describe original research in various areas related to the ER model and reflect the trend of recent years in extending the modeling power or in applying the model for the development of new applications. The papers address both theory and practice, and cover a wide range of database research activity including database design aspects, object-orientation, integrity constraints, query languages, knowledge-based techniques, and others.

This volume also includes the manuscripts of four invited speakers: Peter P. Chen shares his ideas on how to compare the constructs of the Entity-Relationship Approach with that of the Object-Oriented Approach to data modeling. Shamkant B. Navathe provides an analysis of the current state of the art in data modeling, methodologies, and database design tools and points out some directions in which he expects the entire field to move within the next ten years. August-Wilhelm Scheer develops a general architecture for integrated information systems and shows how data modeling fits into this architecture. Dennis Tsichritzis and his co-authors present some of their recent ideas and developments on the modeling of audio/video data which may signify a new challenge for the database community.

In addition to the presentation of the papers contained in the proceedings the conference hosted three tutorials: Ramez Elmasri addressed in his tutorial conceptual modeling of time, Shamkant B. Navathe and Sharma Chakravarthy

discussed concepts and techniques inherent in heterogeneous databases, and Bernhard Thalheim presented the fundamentals of the Entity-Relationship model by taking a theoretical point of view.

Thanks are due to many people who contributed to the success of the conference. The invited speakers, the persons who contributed a tutorial, and all authors who have submitted papers for consideration should be given special credit. The members of the Program Committee and the external reviewers deserve a lot of thanks. Each submitted paper was reviewed three times, and to ensure a fair evaluation papers were reviewed a fourth time in cases the committee members did not agree. Special thanks are due to the Conference Chairman, Peter C. Lockemann, who did all the coordination and ground work. We gratefully acknowledge the conference organizers, especially Wolfried Stucky, the chairman of the Organization Committee. We would like to thank the involved secretariats in Karlsruhe and in Vienna, the chairpersons of the sessions and all other persons that have contributed to the conference. Finally, we thank all conference participants for the contribution to the field that their attendance represents.

Vienna, October 1992

G. Pernul, A M. Tjoa

Sponsorship

The conference is sponsored by

GI Gesellschaft für Informatik
ERI ER Institute

and in cooperation with

AICA Associazione Italiana per l'Informatica ed il Calcolo Automatico
AFCET Association Francaise pour la Cybernétique Economique et Technique
BCS British Computer Society
OCG Österreichische Computer Gesellschaft
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