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Foreword

This volume includes the papers accepted for the Twelfth International Conference on the Entity-Relationship Approach, which was held in Arlington, Texas, U.S.A. on December 15-17, 1993. The conference continued the tradition of bringing together researchers and practitioners in the field of conceptual data modeling and database design.

There were 87 papers submitted to the program committee, which was made up of a distinguished collection of international researchers. Out of these, 40 were published in the proceedings of the conference. The papers were presented in 14 paper sessions during the three days of the conference. The purpose of this book is to make the proceedings more widely available.

There were 3 invited addresses at the conference. The keynote address was presented by Dr. Wesley Chu of University of California at Los Angeles on "Data Modeling for Scientific Databases". The other two talks were by Dr. Craig Thompson of Texas Instruments Inc. on "The Open OODB" and Dr. Shamkant B. Navathe of Georgia Institute of Technology on "Modeling of Databases in Heterogeneous Environments".

In addition to the invited talks, there were 5 tutorials. The tutorials were by Dr. Fred Springsteel (University of Missouri-Columbia) on "Extended ER-based DB Design Tools"; Dr. Günther Pernul (University of Vienna) on "Modeling for Data Security"; Dr. Jose Blakeley (Texas Instruments Inc.) on "Object-Oriented Database Systems"; Mr. Jeffrey Mershon (Logic Works Inc.) on "The IDEF1X Information Modeling Techniques"; and Dr. Bernhard Thalheim (Cottbus Technical University) on "ER is Ready for All Modern Trends".

We would like to thank those who have submitted papers to the conference, and those who participated. We would also like to thank the invited speakers and the tutorial presenters, as well as all those who presented papers at the conference. The program committee was responsible for the excellent selection of papers that were accepted, and we would like to thank them for their time and effort. We would also like to thank the conference chairpersons, Dr. Pei Hsia (University of Texas at Arlington) and Dr. Stefano Spaccapietra (Ecole Polytechnique Federale de Lausanne). Thanks are also due to Dr. Bernhard Thalheim (Cottbus Technical University) for his efforts in arranging the publication of this book, and to Dr. Vram Kouramajian (Rice University) for co-editing the conference proceedings.

Finally, we would like to thank Dr. Bill Carroll, Chairman of CSE Department at the University of Texas at Arlington for supporting the conference, and the administrative staff, particularly Ms. Denise Gonzales for their administrative help. We would also like to thank the graduate students who helped with the conference organization.

Arlington, Texas, April 1994 Ramez Elmasri

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