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OOER '95: Object-Oriented and Entity-Relationship Modeling

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Foreword

Welcome to the Gold Coast and the fourteenth International Conference on Object-Oriented and Entity-Relationship Modelling. This is the first time this conference has been held in Australia. We thank the steering committee for its decision to hold the conference here and hope all of you find the venue conducive to technical, as well as social, interaction.

The Program Chair, Mike Papazoglou, has done a great job in maintaining the tradition of high quality in the conference presentations. I am sure that you will find the keynote talks by Gio Wiederhold and Julian Edwards to be both informative and thought provoking. I would like to thank them for agreeing to be part of the conference's technical program.

I would like to thank all of the sponsors who generously gave their support to this conference, especially Sun Microsystems, Information Industries Board - Queensland, Queensland University of Technology and the Australian Department of Industry Science and Technology.

I hope that you all enjoy your stay on the beautiful Gold Coast of Australia.

F.H. Lochovsky
General Conference Chair
O-O ER'95

October 1995

Preface

The fourteenth International Conference on Object-Oriented Entity-Relationship (O-O ER) Conference provides a forum for researchers and practitioners in the area of conceptual modelling to interact, present existing results and explore directions that affect the current and future generation of information systems. The conference has been renamed to encompass current technological thrusts and directions in the area of conceptual modelling and to provide a broader forum for researchers and practitioners to exchange ideas and report on progress.

This year's theme is the Application of Object-Oriented/Entity-Relationship Technologies to Information Systems Modelling.

The Entity-Relationship approach has been extensively used in many database system and information system design methodologies. Recently, Object-Oriented Technology has not only drawn tremendous interest from the research community but it has also moved into mainstream industrial software design and development.

The O-O ER conference provides an opportunity towards integrating these two technologies and opens new opportunities for modelling by promoting better understanding of applications, cleaner design practices, and more updatable and maintainable systems. It also provides a basis for re-using and retrofitting existing systems and technology.

The topic of the conference is of tremendous interest to both academia and industry. It is one where technological advances in conceptual modelling can have a profound impact on how organisations will model and meet future business objectives and cope with an evolving technology.

In response to the O-O ER'95 call for papers, approximately 120 papers were submitted from 26 countries around the world. 36 papers were accepted based on quality and originality. Each paper was reviewed by three reviewers and all papers were discussed at the program committee meeting held in Brisbane in July 1995. This volume contains in addition to all the papers selected by the program committee, the keynote address paper by Gio Wiederhold and summaries of papers accepted by the Industry Track Chair, Kit Dampney, and his subcommittee.

A conference such as O-O ER'95 depends on the volunteer efforts of a large number of individuals, and we are indeed very fortunate to have been able to put together an excellent team. It has been a real pleasure working together with the members of the program committee and the additional reviewers, who

devoted a considerable amount of their time to reviewing the submitted articles. I was privileged to work together with such highly gifted individuals as Fred Lochovsky (General Chair) and Zahir Tari (Organising Chair). Their commitment, enthusiasm, support, and continuous guidance are gratefully acknowledged.

Special thanks go to Leszek Maciaszek for coordinating the panels, to Makoto Takizawa for coordinating the tutorials, to Kit Dampney and Julian Edwards for coordinating the industrial stream, and Ed Lindsay for his efforts to publicize the Conference. Lastly, I wish to thank Michelle Taylor for her tireless efforts in maintaining the order of papers, and for handling correspondence and registration.

I hope that you will enjoy the conference and that you will find these proceedings a valuable source of information on conceptual modelling techniques and methodologies.

M.P. Papazoglou
Program Chair
O-O ER'95

October 1995

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