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Message from the General Chair

It is my pleasure to welcome you to the Sixteenth International Conference on Data Engineering. This year's conference continues the tradition of being a premier forum for presentation of theoretical and practical results related to databases and data-intensive applications. I trust you will find the program interesting and enjoyable.

The success of a conference depends on the time and energy of many people. The Program Co-Chairs, David Lomet and Gerhard Weikum, and the program committee members have done an outstanding job, resulting in an excellent technical program. Pamela Drew and Anil Nori also did a great job organizing the industrial sessions, as did Michael Carey in organizing the panels. Ling Liu selected and organized a very interesting set of demos of prototype systems. Praveen Seshadri pulled together the tutorial program. Roger Barga served as the Treasurer, Qiang Zhu as the Publicity Chair, Vijay Kumar as Proceedings Chair, and Yannis Papakonstantinou and Chaitan Baru handled Local Arrangements. My sincere thanks to all of you for your effort and dedication. You made my job easy.

I would also like to extend my thanks to the ICDE Steering Committee for their support.

Welcome to beautiful San Diego and enjoy the conference!

Per-Åke (Paul) Larson

ICDE 2000 General Chair

Message from the Program Committee Co-Chairs

The Sixteenth International Conference on Data Engineering (ICDE'2000) is the first major database conference of the new millennium. It clearly signifies that computers in general and database technology in particular have at the very least survived the Y2K problem. It also marks the threshold of a new technology era with a proliferation of exciting data-intensive, network-centric applications and deep penetration of database technology into the cyberspace software infrastructure. The Data Engineering Conference's technical program captures these trends, covering a broad range of topics from data mining and knowledge discovery to XML, e-commerce, and mobile computing, without neglecting the more traditional and still critical engine-technology areas.

As always, choosing the technical program from the submissions was a difficult process lasting most of the summer of 1999. The program committee met on September 24, 1999, for final discussions and to make its decisions. Out of 287 submissions, 41 research papers were selected for full presentations. In addition, 24 submissions were accepted as poster papers. We have exercised great care in this selection process, and are very proud of the resulting strong research program.

Two of the accepted papers deserve special mentioning. The paper "Automating Statistics Management for Query Optimizers" by Surajit Chaudhuri and Vivek Narasayya has been chosen as the best paper of the conference for its path-breaking contribution on a problem of extreme practical relevance towards the elusive goal of self-tuning, zero-admin database systems. The paper "DEMON: Mining and Monitoring Evolving Data" by Venkatesh Ganti, Johannes Gehrke, and Raghu Ramakrishnan has been chosen as the best student paper for its excellent contribution to the important area of data mining.

Many people contributed to ICDE'2000's research program. Clearly, first thanks go to the authors of all submitted papers. It is, after all, their work that becomes the research program. Following the tradition of Data Engineering, the refereeing process was organized into 12 subcommittees each covering a specific area and headed by a vice-chair. We are grateful for the dedication and hard work of all program committee members, and especially the vice-chairs, in making the review process both thorough and effective. We also thank external referees for their very important contribution to the review process. Three vice-chairs deserve extra recognition for serving on the best paper award subcommittee. Finally, ICDE'2000 is the first Data Engineering conference that handled (almost all) the research paper submission and refereeing process electronically via a Web-based conference management tool. We are very grateful to Surajit Chaudhuri, Jay Grieves, Jonathan Simon, and Microsoft Corporation for providing the software and ongoing technical support.

The technical program also includes industrial sessions, panels, and a demo program, and the conference is accompanied by tutorials on contemporary subjects of high practical relevance. The topics covered include exciting trends in industry and research such as Internet-based information services, small-footprint databases, object standards, data warehousing and mining, and XML. We are very grateful to Pam Drew, Anil Nori, Mike Carey, Ling Liu, and Praveen Seshadri for their fine work in putting together these essential elements of ICDE'2000. Thanks also to Vijay Kumar, who very capably compiled the conference proceedings.

Two highlights of the conference are the keynotes by Jim Gray and Dennis Tsichritzis, both on very timely and strategic subjects. Jim's keynote takes database technology into the realm of geographical and astronomical applications that manage terabytes of image and spatial data and pose many challenges beyond traditional database applications. Dennis's keynote addresses the now burning meta issue of how to conduct research in times when IT has become the major force Driving fast-paced evolution of the human economic and social order. We thank Jim and Dennis for sharing their insights with us. Finally, we thank you for attending the first Data Engineering Conference of the new millennium. A conference succeeds in large measure by the participation of a talented and appreciative group of attendees. We sincerely hope that you will find the technical program insightful and stimulating.

David Lomet and Gerhard Weikum

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Daan Velthausz
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Ouri Wolfson
Yi-Leh Wu
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