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Third International Conference on DATA ENGINEERING



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Los Angeles, California, USA

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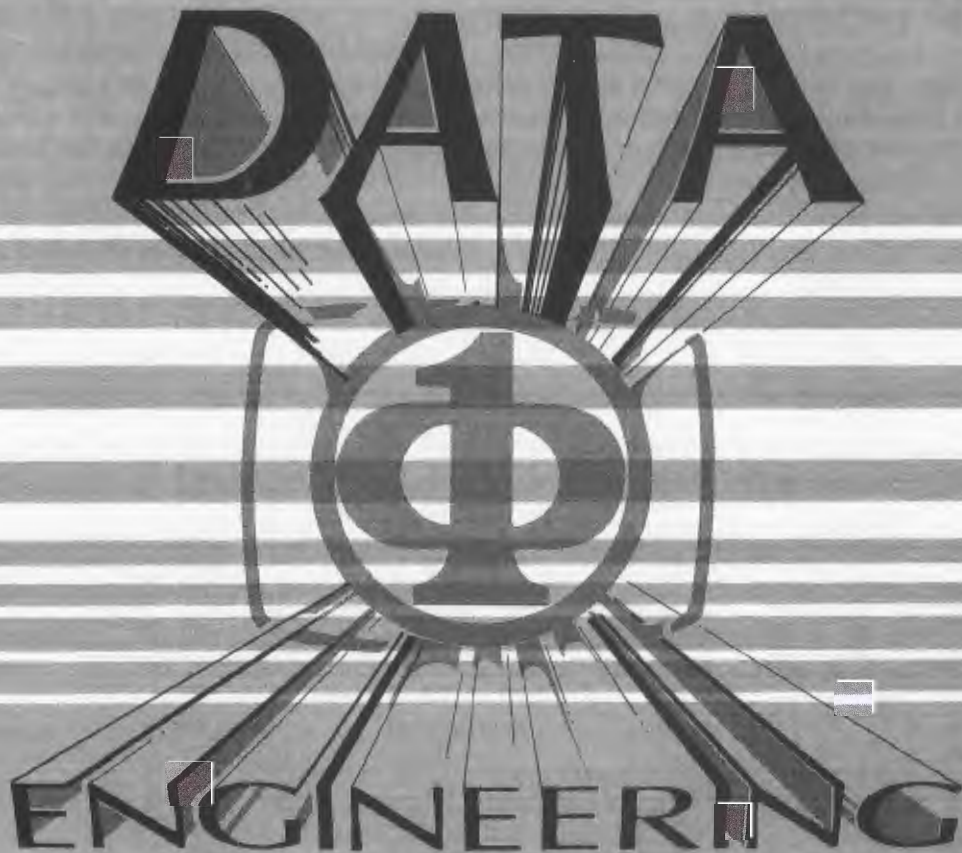
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On behalf of the Program Committee, I express my sincere gratitude to the keynote speakers, authors, panelists, session organizers, and all participants. They have worked very hard to keep a high standard of quality for this conference.

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CONFERENCE OVERVIEW

It is an honor to report on the program of the Third International Conference on Data Engineering. This year, we have received 209 submissions from fourteen countries. The level of international participation is tabulated as follows.

	Submitted	Accepted	Prog.Comm.
Africa	7	1	0
Asia	11	3	6
Australia	2	0	1
Europe	35	8	13
N. America	154	60	75

Each submitted paper was reviewed by one of the Program Committee Co-Chairs and by at least two members of the Program Committee, sometimes aided by local reviewers. The Program Committee met in Chicago on August 9-10, 1986, and decisions were made on all submitted papers and panel-session proposals. The following table shows an approximate classification by topics of the submitted and accepted papers.

	Submitted	Accepted
Database Design and Modeling	38	9
Performance Evaluation and Algorithms	18	8
Integrity, Security, and Fault Tolerance	17	8
Query Language	10	4
Artificial Intelligence	12	3
Knowledge Base	22	7
Database Machines	15	7
Distributed Database and Processing	11	3
Distributed Database Control	40	15
Software Engineering	10	1
Applications	16	7

We have organized the submitted papers into 21 sessions. Two of these sessions (Sessions 20 and 23) are devoted entirely to papers on industrial applications and experience.

A current working definition of data engineering was proposed by the IEEE Computer Society Technical Committee on Data Engineering, which states that "the study of data engineering focuses on the key technical issues related to data and knowledge about the

data in the design, development, management, and utilization of information systems, such as languages to define, access, and manipulate databases as well as knowledge bases, and, in general, numerical, textual, and pictorial information; strategies and mechanisms to provide system modeling and design and data access, security, integrity, and control; architectures, systems and components to provide data services within centralized and distributed information systems; and development of ways to prolong the useful life of data." Most of the topics covered by the accepted papers are related to one or more aspects of the above definition. With the limited time and resources, it would be quite impossible to cover thoroughly all the aspects of data engineering. However, the accepted papers represent some of the best results in both the theoretical and applied aspects of data engineering.

We will have a discussion concluding each session with contributed papers. This was an experimental idea at the Second Data Engineering Conference that was well received. A discussant will be assigned to these sessions and will lead a discussion relevant to the presentations in the session. The discussant will present a short position statement addressing questions such as 'where do we stand?' and 'which way should we go?' The papers presented in the session can also be used as a basis for the discussion.

We are also complementing these discussion sessions with six traditional panels in areas where research directions are being set.

We are privileged to have three outstanding keynote speakers who are scheduled to speak on the first two days of the conference. On the first day Philip Neches will speak on his experience building real database machines. His presentation will be followed by a track on architectural support and parallel processing throughout the first day.

We are privileged to have Lofti Zadeh and Jerold Kaplan to keynote the conference on the second day. Dr. Zadeh is world renowned for his research on fuzzy logic and artificial intelligence. He was particularly instrumental in developing methods for uncertain data management, which he will address in his key-

note speech. Dr. Kaplan is known for his work on making database act cooperatively with the users. He will share with us his recent experience in building new commercial products which provide intelligent and flexible databases for individuals. Their presentations will be followed by a track on artificial intelligence and knowledge representations throughout the second day.

In the final plenary panel, we will summarize this conference by addressing questions around the general theme: "What Have We Learned?" We hope that after you have heard the presentations in this conference, we can have a fruitful discussion regarding what we

learned in this conference and possible improvements for future Data Engineering Conferences.

The Technical Committee on Data Engineering which sponsors this conference produces a quarterly bulletin, with each issue devoted to one topic of interest to the Data Engineering community. An application form requesting membership can be found at the end of these proceedings.

I believe that this year's Program provides all participants with varied, in-depth technological insights and ideas. All suggestions for the improvement of future Data Engineering Conferences are welcome.

Benjamin W. Wah
Program Chairperson

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