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13th International Conference, DASFAA 2008
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Foreword

Welcome to the proceedings of the 13th International Conference on Database Systems for Advanced Applications (DASFAA 2008) which was held in New Delhi, India. DASFAA 2008 continued the tradition of providing an international forum for technical discussion among researchers, developers and users of database systems from academia, business and industry. Organizing DASFAA 2008 was a very rewarding experience; it gave us an excellent opportunity to work with many fine colleagues both within and outside India.

We would like to thank Jayant Haritsa and Ramamohanarao Kotagiri for putting together a world-class Program Committee. The committee worked very hard to bring a high-quality technical program to the conference. DASFAA 2008 also included an industrial track co-chaired by Anand Deshpande and Takeshi Fukuda.

The conference also featured three tutorials: (1) Preference Query Formulation and Processing: Ranking and Skyline Query Approaches, by Seung-Won Huang and Wolf-Tilo Balke, (2) Stream Processing: Going Beyond Database Management Systems, by Sharma Chakravarthy, and (3) The Semantic Web: Semantics for Data and Services on the Web, by Vipul Kashyap and Christoph Bussler. We would like to thank S. Sudarshan and Kian-lee Tan for their effort in organizing the tutorials, Srinath Srinivasa and Wookey Lee for the panels, Prasan Roy and Anthony Tung for the demos, and Sanjay Chawla and Chee-Yong Chan for the workshops.

This conference would not have been possible without the support of many other colleagues: S.K. Gupta (Honorary Conference Chair), Mukul Joshi and Takahiro Hara (Publicity Chairs), Vikram Pudi (Publication Chair), Rajeev Gupta (Website Chair), J.P. Gupta (Organization Chair), Naveen Kumar and Neelima Gupta (Local Arrangement Chairs).

We greatly appreciate the support of our sponsors without which a high-quality conference like DASFAA would not have been accessible to a large number of attendees. Finally, our thanks to the DASFAA Steering Committee, especially its Chair, Kyu-Young Whang, for his constant encouragement and support.

March 2008

Mukesh Mohania
Krithi Ramamritham

Message from the Program Committee Chairs

The 13th International Conference on Database Systems for Advanced Applications (DASFAA 2008) was held in New Delhi, the historically-rich national capital of India, from March 19 to 21, 2008. DASFAA is an annual international database conference, located in the Asia-Pacific region, showcasing state-of-the-art research and development activities in database systems and their applications. It provides a forum for technical presentations and discussions among database researchers, developers and users from academia, business and industry.

The Call for Papers attracted 173 research and industry submissions from 30 countries, spanning the globe, reflecting DASFAA's truly international appeal. Each paper was rigorously reviewed by three members of the Program Committee, which included 100-plus database experts from 20 countries. After sustained discussions on the conference bulletin board, 27 full papers and 30 short papers were finally selected for presentation at the conference and are featured in this proceedings volume.

The chosen papers cover the entire spectrum of database research ranging from core database engines to middleware to applications. Featured topics include query and transaction processing, spatial and temporal databases, mobile and distributed databases, XML, data mining and warehousing, data streams and P2P networks, and industrial applications. This rich mixture of papers made the conference appealing to a wide audience and laid the foundation for a synergistic exchange of views between researchers and practitioners.

The paper titled "Bulk-Loading the ND-Tree in Non-ordered Discrete Spaces," by Seok, Qian, Zhu, Oswald and Pramanik from the USA, was selected for the Best Paper award by a committee chaired by Theo Haerder of the University of Kaiserslautern, Germany. A cleverly designed technique is presented in this paper for efficiently bulk-loading index structures on attribute domains, such as genomic sequences, that have a finite set of discrete values and no natural ordering among these values.

Three tutorials from leading international experts that explore new horizons of database technology extending to intelligent query responses, stream processing and the Semantic Web were also featured in the program. A set of eight demos of prototype systems, spanning data mining, data warehousing, Semantic Web and temporal data, showcased compelling applications of novel technologies. A thought-provoking panel on the future prospects of data mining research provided a forum for generating discussion and audience participation. Finally, there were two sessions of invited talks from industry experts, delivering a ringside view of database technologies and challenges.

The conference was privileged to host keynote addresses by Beng-Chin Ooi of the National University of Singapore, Surajit Chaudhuri of Microsoft Research, and Anand Deshpande of Persistent Systems, representing academia, industrial

research and commercial industry, respectively. Together, they provided a holistic perspective on the world of databases from diverse angles of community storage, autonomic systems and technology transfer, especially useful for research students scouting around for dissertation topics.

We thank all the session chairs, tutorial speakers, authors, panelists and participants for ensuring a lively intellectual atmosphere and exchange of views. We also thank all members of the Dasfaa Steering Committee, the Organizing Committee and the Program Committee for generously contributing their time and expertise, ensuring a high-quality program of lasting value to the conference attendees. A special note of thanks to Kyu-young Whang for expertly guiding us through the entire conference process, and to the PC members for their painstaking reviews and discussions.

In closing, we believe that all participants of the DASFAA 2008 conference in New Delhi found it to be a technically fruitful and culturally stimulating experience.

March 2008

Jayant R. Haritsa
Ramamohanarao Kotagiri

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