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Ralf Hartmut Güting   Dimitris Papadias  
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# Advances in Spatial Databases

6th International Symposium, SSD'99  
Hong Kong, China, July 20-23, 1999  
Proceedings



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# Preface

The Sixth International Symposium on Spatial Databases (SSD'99) was held in Hong Kong, China, July 20-23, 1999. This is a “ten-year anniversary” edition. The series of conferences started in Santa Barbara in 1989 and continued bi-annually in Zürich (1991), Singapore (1993), Portland, Maine (1995), and Berlin (1997). We are very pleased that on this occasion Oliver Günther, one of the initiators of the conference in 1989, agreed to give an “anniversary talk” in which he presented his view of SSD in the past as well as in the future ten years.

SSD is well established as the premier international conference devoted to the handling of spatial data in databases. The number of submissions has been stable during the last years; in 1999 there were 55 research submissions, which is exactly the same number as for the last conference in Berlin. Out of these, the program committee accepted 17 excellent papers for presentation. In addition to the “anniversary talk”, the technical program contained two keynote presentations (Christos Papadimitriou, Timos Sellis), four tutorials (Markus Schneider, Leila De Floriani and Enrico Puppo, Jayant Sharma, and Mike Freeston), and one panel.

The papers included in these proceedings reflect some of the current trends in spatial databases. Classical topics such as spatial indexing or spatial join continue to be studied, as well as interesting new directions such as including generalization/scale in indexing or treating multiway instead of binary joins. Some topics such as generalization, spatial data mining, or treatment of uncertainty have been around for a while and continue to be in the focus of interest. A strong newcomer in this volume is the topic of spatio-temporal databases, especially with a “moving objects” flavor. One reason for increased interest in this area is the existence of the related European Research Networks; this was also addressed in the keynote speech by Timos Sellis.

Furthermore, for the first time SSD offered a track with presentations of “industrial and visionary applications” papers. We hope that this will further promote the exchange of ideas between practitioners and researchers, especially by pointing out research problems arising in practice, and giving researchers feedback on how suitable their solutions are within a system context. These contributions were selected by a small industrial subcommittee of the program committee.

Numerous people helped to make this conference a success. First, the members of the program committee as well as the external referees did an excellent job in providing careful reviews, and in conducting engaged conflict resolution discussions via email before the program committee meeting. The program committee members who attended the meeting in Hagen deserve special credit. We also thank Agnès Voisard for her help in promoting this event, and for a lot of good advice based on her experience with the last conference. Thanks to Dave Abel for organizing a careful selection process for the industrial contributions.

Thanks to Anne Jahn at FernUniversität Hagen for a lot of technical help in organizing the reviewing process and in producing the proceedings. We also thank several graduate students at HKUST, including Nikos Mamoulis, Panos Kalnis, and Marios Mantzourogianis for assisting in all kinds of small problems (WWW design, bookings, etc.). Then, several offices of the University (HKUST) were quite helpful, in particular the Finance Office (registrations), the Purchasing Office (hotel accommodations) and the Educational Technology Center (poster preparation).

We are grateful to our industrial sponsors, Environmental Systems Research Institute (ESRI) and Oracle Corporation, for their generous support. Furthermore, we would like to thank IEEE HK Chapter, the Sino Software Research Institute, and the Department of Computer Science, HKUST, for providing us with initial funding. Co-operation with ACM-SIGMOD and the U.S. National Center for Geographic Information and Analysis is also gratefully acknowledged.

May 1999

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