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Advances in Spatial and Temporal Databases

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Proceedings

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Preface

SSTD 2009 was the 11th in a series of biannual events that discuss new and exciting research in spatio-temporal data management and related technologies. Previous symposia were successfully held in Santa Barbara (1989), Zurich (1991), Singapore (1993), Portland (1995), Berlin (1997), Hong Kong (1999), Los Angeles (2001), Santorini, Greece (2003), Angra dos Reis, Brazil (2005), and Boston (2007). Before 2001, the series was devoted solely to spatial database management, and called SSD. From 2001, the scope was extended in order to also accommodate temporal database management, in part due to the increasing importance of research that considers spatial and temporal aspects jointly.

SSTD 2009 introduced several innovative aspects compared to previous events. There was a demonstrations track which included ten presentations of systems related to the topics of interest. In addition to that, the event included a poster session with seven presentations of innovative research developed at an early stage. For the first time in the SSTD series, the best paper of the symposium was awarded and a few high-quality papers were selected and the authors were invited to submit extended versions of their work to a special issue of the *Geoinformatica* journal (Springer). Prior to the symposium, there was a two-day advanced seminar, which hosted three half-day tutorials on state-of-the-art topics within spatio-temporal data management, held by distinguished international researchers.

SSTD 2009 received 62 research submissions and 11 demonstration submissions from 20 countries (based on the affiliation of the first author). A thorough review process led to the acceptance of 20 high-quality papers, geographically distributed as follows: USA 6, Greece 3, Germany 2, Belgium 1, Brazil 1, Denmark 1, Hong Kong 1, Ireland 1, Israel 1, Singapore 1, South Korea 1, and United Kingdom 1. The papers are classified in the following categories, each corresponding to a conference session: (1) Spatial and Flow Networks, (2) Integrity and Security, (3) Uncertain Data and New Technologies, (4) Indexing and Monitoring Moving Objects, (5) Advanced Queries, and (6) Models and Languages.

Distinguished members of the community delivered the three keynotes, covering diverse subjects. Mor Naaman (Rutgers University) discussed how the spatio-temporal information tracked by social media services allows for a new type of “spatio-tempo-social” analysis of world facts and human behavior. Sudhakar Menon (ESRI) gave an overview of the design and architecture of GIS Servers for Web-based Information Systems, using ESRI’s ArcGIS Server system as a concrete example. Lars Arge described some of the recent advances in the development of worst-case efficient range search indexing structures.

The success of SSTD 2009 was the result of team effort. First, we would like to thank the authors, irrespectively of whether their papers were accepted or

not, for their support of the conference series and for sustaining the high quality of the submissions. Second, we are grateful to the members of the Program Committee (and the external reviewers) for their thorough and timely reviews. Third, we thank the invited speakers for their excellent keynotes. Fourth, we are grateful to Christian S. Jensen for his advice and support and to Man Lung Yiu and Hua Lu for maintaining the conference website and publicizing the event. Finally, we would like to thank our sponsors ESRI, Det Obelske Familiefond, and Otto Mønstedts Fond for their generous support. We believe that SSTD 2009 continued the successful tradition of the series, providing an interesting program and lively discussions in a pleasant environment.

May 2009

Nikos Mamoulis
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