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# Advances in Spatial and Temporal Databases

14th International Symposium, SSTD 2015  
Hong Kong, China, August 26–28, 2015  
Proceedings

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## Preface

This volume contains the proceedings of the 14th International Symposium on Spatial and Temporal Databases (SSTD). Included are research contributions in the area of spatial and temporal data management and related computer science domains presented at SSTD 2015 in Hong Kong, China. The symposium brought together, for three days, researchers, practitioners, and developers for the presentation and discussion of current research on concepts, tools, and techniques related to spatial and temporal databases.

SSTD 2015 was the 14th in a series of biannual events. Previous symposia were 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 (2005), Boston (2007), Aalborg (2009), Minneapolis (2011), and Munich (2013). Before 2001, the series was devoted solely to spatial database management, and was called The International Symposium on Spatial Databases. Starting in 2001, the scope was extended in order to also integrate the temporal dimension and accommodate spatial and temporal database management issues, owing to the increasing importance of research that considers spatial and temporal dimensions of data as complementary challenges.

This year the symposium received 64 submissions from authors in 27 different countries, which were reviewed by at least three of the 53 Program Committee members, helped by 89 external reviewers. At the end of a thorough process of reviews and discussions, 24 submissions were accepted for presentation at the symposium. SSTD 2015 also continued several innovative topics that were successfully introduced in previous events. We also formed a Best Paper Committee including eight committee members to select the best paper for SSTD 2015. In addition to the research paper track, the conference hosted a demonstration and vision/challenge track. Demonstrations and vision/challenge papers were solicited by separate calls for papers. While proposals for demonstrations had to illustrate running systems that showcase the applicability of interesting and solid research, the vision/challenge submissions had to discuss novel ideas that are likely to guide research in the near future and/or challenge prevailing assumptions. The submissions to the demo and vision/challenge track (12 demonstration submissions and two vision/challenge papers submissions) were evaluated by dedicated Program Committees, recruited by the demonstrations co-chairs, and eight demos were selected for the conference program.

We were very fortunate to have had two well-accomplished researchers from academia and industry as keynote speakers opening the first two days of the conference: Prof. Dimitris Papadias (The Hong Kong University of Science and Technology) gave a presentation on “Query Processing in Geo-Social Networks” and Jim Steiner (Oracle) talked about “Emerging Geospatial Trends: The Convergence of Technologies.” Both are very attractive and timely topics, from the academic and industrial points of view.

The success of SSTD 2015 was the result of a team effort. Special thanks go to many people for their dedication and hard work, in particular to the local organizers, publicity

chairs, proceedings chair, and webmasters. Naturally, we owe our gratitude to more people, and in particular we would like to thank the authors, irrespectively of whether their submissions were accepted or not, for supporting the symposium series and for sustaining the high quality of the submissions. Last but most definitely not least, we are very grateful to the members of the Program Committees (and the external reviewers) for their thorough and timely reviews.

Finally, these proceedings reflect the state of the art in the domain of spatiotemporal data management, and as such we believe they form a strong contribution to the related body of research and literature.

June 2015

Christophe Claramunt  
Raymond Chi-Wing Wong  
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