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# Spatial Data and Intelligence

Second International Conference, SpatialDI 2021  
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Proceedings

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# Preface

This volume contains the papers from the ACM Spatial Data Intelligence China Conference (SpatialDI 2021). The first edition of SpatialDI was held online due to the impact of COVID-19. The 2nd edition (SpatialDI 2021) was held in Zhejiang Hotel, Hangzhou, China, 22–24, April 2021.

SpatialDI 2021 mainly aimed to address the opportunities and challenges brought about by the convergence of Computer Science, GIScience, AI, and beyond. The main topics of the conference were Spatial Machine Learning and Artificial Intelligence, Spatial Data Acquisition and Positioning, High-Performance Computing of Large-scale Spatial Data, Mobile Data Management and Analysis, Geographic Information Retrieval, Spatial Semantic Analytics, Autonomous Transportation and High-precision Maps, Urban Analytics and Mobility, Spatial-temporal Visualization and Visual Analytics, Location-Based Services and Privacy Issues, Geo-social Network Analytics, Geo-computation for Social Science.

We received 72 submitted contributions for SpatialDI 2021. All of the submitted papers were assigned to three members of the Program Committee (PC) for peer review. All reviews were checked and discussed by the PC chairs and additional reviews or meta-reviews were elicited if necessary. Finally, we accepted 30 papers for SpatialDI 2021, with an acceptance rate of 41.67%.

In addition to regular papers, the conference invited Academician Huadong Guo (a member of the Aerospace Information Research Institute, Chinese Academy of Sciences), Academician Renzhong Guo (a member of the Chinese Academy of Engineering, Dean of the Research Institute for Smart Cities, Shenzhen University), Prof. Hui Lin (a member of the International Eurasian Academy of Sciences, Dean of the School of Geography and Environment, Jiangxi Normal University), Prof. Yunhao Liu (Dean of the Global Innovation Exchange, Tsinghua University, ACM/IEEE Fellow), Prof. Christian S. Jensen (Aalborg University, Fellow of the European Academy of Engineering, ACM/IEEE Fellow), and Prof. Jianwei Yin (Associate Dean of the College of Computer Science and Technology, Zhejiang University) to give the keynotes. The event was organized into 8 forums: Big Earth Data and the United Nations SDG; Spatial Intelligent Computing; Social Geographical Computing; Spatial-temporal Data Management; Blockchain and Data Services; Urban Computing; Location-based Services and Smart Travel; and Rising Star Award and the Doctoral Dissertation Award Special Session.

The proceedings editors wish to thank our keynote and invited speakers and all the reviewers for their contributions. We also thank Springer for their trust and for publishing the proceedings of SpatialDI 2021.

Gang Pan  
Hui Lin  
Xiaofeng Meng  
Yunjun Gao  
Yong Li  
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