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## Editorial

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**Biographical notes:** Jihong Guan is now a Professor at Department of Computer Science and Technology, Tongji University, Shanghai, China. She received her Bachelor degree from Huazhong Normal University in 1991, her Master degree from Wuhan Technical University of Surveying and Mapping (merged into Wuhan University since August 2000) in 1991, and her PhD from Wuhan University in 2002. Before joining Tongji University, she served in the Department of Computer, Wuhan Technical University of Surveying and Mapping from 1991 to 1997, as an Assistant Professor and an Associate Professor (since August 2000) respectively. She was an Associate Professor (August 2000–October 2003) and a Professor (since November 2003) in the School of Computer, Wuhan University. Her research interests include databases, data mining, distributed computing, bioinformatics, and geographic information systems. She has published more than 100 papers in domestic and international journals and conferences.

Xin Wang has been an Assistant Professor at the Department of Geomatics Engineering, University of Calgary since July 2007. She holds a BSc in Computer Science, MEng in Software Engineering from Northwest University, China and a PhD in Computer Science from University of Regina. Her current research interests are spatial databases and spatial data mining, ontology and knowledge engineering in GIS, web GIS and privacy protection in GIS. She has published productively in various international journals and conferences.

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Spatial data exists in various information systems and applications. The unprecedented amounts of spatial data that have been amassed and that are still being produced rapidly, via various facilities such as sensors, GPS receivers, smart phones and remote sensing, calls for extensive, deep and sustaining researches on spatial information modelling, management and mining. In the past decade, we witnessed increasing research interests in these areas from database, data mining and geographic information systems (GIS) communities. The *IJDMMM* special issue on ‘Spatial information modelling, management and mining’ intends to solicit original research contributions and practical experiences of spatial data modelling, management and mining.

Submissions for this special issue consist of two parts, some are selected from the accepted papers of the 1st International Workshop on Spatial Information Modeling, Management and Mining (SIM3-2011 in conjunction with DASFAA 2011), the other are newly submitted. Through two rounds of blind review, six papers are accepted for inclusion in the special issue, based on the reviewing comments and discussions among the guest editors.

The six accepted papers cover geovisual analysis, spatial data mining, data warehousing and data management, and geospatial services. Concretely, Tahir et al. present a web-based visualisation tool to support map personalisation by analysing users’ mouse movement data. Huang and Gartner propose to employ collaborative filtering (CF) approaches to mine GPS trajectories for providing Amazon-like points of interest (POI) recommendations. Jin et al. propose a method to find out the optimal parameter value of the bandwidth for clustering with Bayesian posterior density estimation and MCMC method. Viswanathan and Schneider comprehensively survey the requirements and approaches of spatial data warehousing. Granell et al. assess whether WPS-based geospatial services can be viewed from the architectural principles exposed in representational state transfer (REST). Wang et al. present a framework and a prototype of GML data management.

We are grateful to all the authors contributing to this special issue, and appreciate the reviewers who helped in reviewing the submissions and selecting quality papers. We also thank Professor John Wang, the Editor-in-Chief of *IJDMMM*, for supporting this special issue and especially for his excellent coordination and cooperation in preparing the special issue. We sincerely hope that this special issue is interesting and helpful to the readers.