**Big Trajectory Data: from fundamentals to performance**

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**Abstract:**  
Spatial trajectory data record movement history of objects in the geographical space. Spatiotemporal data management and query processing have been an active research topic over the last three decades, spanning a wide range of areas including databases, geographical information systems and data mining. With more and more trajectory data available and an increasing amount of interest from business communities, we now need to revisit trajectory database research from some basic questions such as how we can represent trajectory data in databases, how we should measure trajectory similarity, to more advanced questions such as how we can take advantages of modern hardware platforms to support TB level of trajectory data processing. In this talk we will share our thoughts on these issues, and discuss some recent work done by the spatial database group at the University of Queensland.

**About the Speaker:**  
Xiaofang Zhou is a Professor of Computer Science at the University of Queensland. He received his BSc and MSc degrees in Computer Science from Nanjing University, China, and PhD in Computer Science from the University of Queensland. Before joining UQ in 1999, he worked as a researcher in Commonwealth Scientific and Industrial Research Organisation (CSIRO) in Australia, leading its Spatial Information Systems group. He has been working in the area of spatial and multimedia databases, data quality, high performance query processing, Web information systems and bioinformatics, co-authored over 250 research papers with many published in top journals and conferences such as SIGMOD, VLDB, ICDE, ACM Multimedia, The VLDB Journal, ACM Transactions and IEEE Transactions. He was a Program Committee Co-chair the 29th International Conference on Data Engineering (ICDE 2013), and a General Co-chair of ACM Multimedia International Conference on Data Engineering (ICDE 2013), and a General Co-chair of ACM Multimedia conference in 2015. He has been on the program committees of numerous international conferences, including SIGMOD, VLDB, ICDE, WWW and ACM Multimedia. Currently he is an Associate Editor of The VLDB Journal, IEEE Transactions on Cloud Computing, World Wide Web Journal, and Distributed and Parallel Databases. He is a current member of IEEE Technical Committee on Data Engineering (TCDE) Executive Committee, IEEE TCDE Award Committee, and the Steering Committees of DASFAA, WISE, APWeb and Australasian Database Conferences. In the past he was an Associate Editor of IEEE Transactions on Knowledge and Data Engineering (2009-2013) and Information Processing Letters. Xiaofang is a specially appointed Adjunct Professor under the Chinese National Qianren Scheme hosted by Renmin University of China (2010-2013), and by Soochow University since July 2013 where he leads the Research Center on Advanced Data Analytics (ADA).

All are welcome!  
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