

Preface

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We are now living in a mobile information era, which is fundamentally changing science and society. Location Based Services (LBS), which deliver information depending on the location of the (mobile) device and user, play a key role in this mobile information era. In recent years, lots of progress has been achieved in the research field of LBS, due to the increasingly maturity of the underpinning communication technologies and mobile devices. LBS have become more and more popular in not only citywide outdoor environments, but also shopping malls, museums, and many other indoor environments. They have been applied for emergency services, tourism services, intelligent transport services, social networking, gaming, assistive services, etc.

Since its initiation by Georg Gartner from TU Wien (Austria) in 2002, the LBS conference series has become one of the most important scientific events decided to LBS. The conferences have been held in Vienna (2002, 2004, 2005), Hong Kong (2007), Salzburg (2008), Nottingham (2009), Guangzhou (2010), Vienna (2011), Munich (2012), Shanghai (2013), Vienna (2014), Augsburg (2015), Vienna (2016), and Zurich (2018). Starting from 2015, the LBS conferences have become the annual event of the Commission on Location-Based Services of the International Cartographic Association (ICA) (<http://lbs.icaci.org/>). In November 2019, the 15th LBS conference (LBS 2019) will be hosted by TU Wien in Vienna, Austria.

This book contains a selection of peer-reviewed full papers submitted to LBS 2019. All the chapters have been accepted after a rigor double-blind reviewing process. The book provides a general picture of recent research activities related to the domain of LBS. Such activities emerged in the last years, especially concerning issues of outdoor/indoor positioning, smart environment, spatial modeling, personalization and context-awareness, cartographic communication, novel user interfaces, crowd sourcing, social media, mobility analytics, usability and privacy.

We would like to thank all the authors for their excellent work and all referees for their critical and constructive reviews. We hope you enjoy reading these papers, and look forward to your participation in the future LBS conferences.

Georg Gartner and Haosheng Huang

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Reviewers

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