Combining the functionality of mobile devices (smartphones and tablets), wireless communication (Wi-Fi, Bluetooth and 3/4G), and positioning technologies (GPS, Assisted GPS and GLONASS) results in a new era of mobile geographic information systems (GIS) that aim at providing various invaluable services, including location-based services, intelligent transportation systems, logistics management, security and safety, etc. Many mobile GIS applications have been developed to solve challenging real-world problems and improve our quality of life.

MobiGIS 2015 (http://www.mobigis.org) was held in conjunction with the 23rd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (SIGSPATIAL 2015) on November 3, 2015 in Seattle, Washington, USA. It aims at bringing together researchers and practitioners from the GIS community, the mobile computing community, and the data management community. Many current research areas, such as spatio-temporal databases, spatio-temporal data mining, mobile cloud computing, remote sensing, participatory sensing, or social networks, raise research problems that lie at the boundary between these three communities. MobiGIS’s goal is to foster an opportunity for researchers from these three communities to gather and discuss ideas that will shape and influence these emerging GIS-related research areas.

MobiGIS 2015 has accepted 11 research papers for oral presentations (30 minutes for each full paper and 20 minutes for each short paper). MobiGIS 2015 was a one-day workshop consisting of three sessions: (1) Location-based Query Processing, (2) MobiGIS Applications, Location-based Services, and (4) Mobile Data Analytics and Modeling. We would like to express our special thanks to the keynote speaker, Prof. Goce Trajcevski (Northwestern University, USA), who gave a very interesting and inspiring talk “Fusion Uncertain Location Data from Heterogeneous Sources”.

We would also like to thank the authors for publishing and presenting their papers in MobiGIS 2015, and the program committee members and external reviewers for their professional evaluation and help in the paper review process. We would also like to give very special thanks to our session chairs: Shayma Alkobaisi (United Arab Emirates University, United Arab Emirates) and Amgad Madkour (Purdue University, USA). We hope that the proceedings of MobiGIS 2015 will inspire new research ideas, and that you will enjoy reading them.