Preface

This volume contains the selected papers and two invited papers presented at the *Seventh International Workshop on Information Fusion and Geographic Information Systems: Deep Virtualization for Mobile GIS* (*IF&GIS' 2015*) held during May 18–20, 2015 in Grenoble, France. IF&GIS is a biannual international workshop that brings together academics and industrials from a wide range of disciplines including computer science, geography, environmental and urban sciences, applied mathematics and social science at large. It continues a series of successful workshops held regularly since 2003 in St. Petersburg, in Brest in 2011, and 2013 back to the St. Petersburg. It has been continuously organized by "SPIIRAS Hi Tech Research and Development Office Ltd" and the French Naval Academy Research Institute. In 2015 IF&GIS was organized together with the University Grenoble Alpes in co-location with the W2GIS International Symposium. This year IF&GIS was specifically oriented towards virtualization issues related to mobile GIS.

Virtualization is nowadays an accepted standard IT practice and concept whose objective is to provide a set of software technologies that separate the device environment and the associated application software from the physical client device. When applied to the GIS domain, virtualization supports the development of self-contained, centrally managed and user-oriented GIS software on-demand. It allows users to be productive anywhere with virtual GIS-applications that work as if they are locally installed, extending the benefits of virtualization to satisfy a full range of the GIS user requirements.

The objective of this workshop was to present recent scientific and technological innovations related to the development of GIS that can be considered as part of this virtualization effort. The submission process attracted 23 full paper submissions from ten countries, amongst which ten were selected for full paper presentation and eight as abstract presentations at the workshop. The presented papers cover a large set of themes and have been scheduled in three sessions: Web-Based and Location-Based GIS Applications, Geospatial Crowdsourcing, Modeling and Computing, Applying GIS Technologies to Various Application Domains. The scope of the seventh IF&GIS workshop also covers multidisciplinary issues and applications

such as environmental and disaster management, ethnography and historical studies. The program also features two invited papers by Dr. James D. Carswell from the Digital Media Centre of the Dublin Institute of Technology and Professor Leonid I. Borodkin from Lomonosov Moscow State University.

The success of the workshop was assured by the team efforts of sponsors, organizers, reviewers and participants. We would like to recognize the contribution of the Program Committee members and thank all reviewers for their support and hard work. Our sincere gratitude goes to all participants and all authors of the submitted papers. Finally, we also would like to acknowledge the support and collaboration of Springer's LNGC team, managed by Editorial Director Dieter Merkle, Publishing Editor Dr. Christian Witschel, Publishing Editorial Assistant Agata Oelschlaeger and Project Coordinator Suresh Rettagunta.

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Deep Virtualization for Mobile GIS
Popovich, V.; Claramunt, C.; Schrenk, M.; Korolenko, K.;
Gensel, J. (Eds.)