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Katsumi Tanaka   Peter Fröhlich
Kyoung-Sook Kim (Eds.)

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Katsumi Tanaka
Kyoto University, Graduate School of Informatics
Department of Social Informatics
Yoshida-Honmachi, Sakyo-ku, Kyoto 606-8501, Japan
E-mail: tanaka@dl.kuis.kyoto-u.ac.jp

Peter Fröhlich
Telecommunications Research Center Vienna (ftw.)
Donau-City-Straße 1/3, 1220 Vienna, Austria
E-mail: froehlich@ftw.at

Kyoung-Sook Kim
Knowledge Creating Communication Research Center
National Institute of Information and Communications Technology
3-5 Hikaridai, Seika-cho, Soraku-gun, Kyoto 619-0289, Japan
E-mail: ksookim@nict.go.jp

Preface

Continuing advances in the development of wireless and Internet technologies generate ever increasing interest in the diffusion, usage, and processing of geo-referenced data of all types. Spatially-aware wireless and Internet devices also offer new ways of accessing and analyzing geo-spatial information in both real-world and virtual spaces. Consequently, new challenges and opportunities have been provided that expand the traditional GIS research scope into the realm of intelligent media, including geomedia with context-aware behaviors for self-adaptive use and delivery.

The International Symposium Series on Web and Wireless Geographical Information Systems (W2GIS) provides an up-to-date review of advances on recent development and research results in this research field. W2GIS is a series of successful events alternating locations between East Asia and Europe. The 10th symposium returned to Kyoto, where the W2GIS series was first launched in 2001. This proceedings volume contains the papers selected for presentation at W2GIS 2011, held in March 2011 in Kyoto.

We had 36 submissions from 20 countries, many of them of excellent quality. Each paper received four reviews. A total of 13 full and 3 short papers plus 2 short keynote papers were finally accepted for presentation. The program and proceedings cover a wide range of topics including geographic information retrieval on the web, geo-spatial semantic and sensor web, location-based services, advanced GIS visualization techniques, personalization and adjustment for mobile GIS applications, and geo-spatial data quality and context processing.

We had the privilege of having two invited talks by Steve Coast (founder of OpenStreetMap) and Xing Xie (Microsoft Research Asia) plus one special presentation by Nobuo Kawaguchi from Nagoya University in Japan. The best paper of the symposium was selected by the Steering Committee and invited for publication in the Transactions in GIS.

We wish to thank the authors who contributed to this symposium, for the high quality of their papers and presentations, and the Springer LNCS team, for their support. Furthermore, we are very grateful to the Kyoto University GCOE program, for hosting the event. We would also like to thank all the Program Committee members for the timeliness and quality of their evaluations, as well as the Steering Committee and Local Organization Committee for their continuous support.

March 2011

Katsumi Tanaka
Peter Fröhlich
Kyoung-Sook Kim

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