Einladung zum Vortrag

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Universität Bremen | Cartesium Rotunde

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Geosmartness for personalized and sustainable mobility of the future

Mobility and transport of people has been rising constantly for decades. Despite the many advantages and opportunities mobility has brought to our society, there are also severe drawbacks such as the transport sector’s role as main contributor of CO2 emissions or traffic jams. In order to assure livable environments for future generations we must solve these challenging problems and also support people in their complex mobile decision-making. In this talk I will demonstrate how Geosmartness, a combination of novel spatial data sources, computational methods, and geospatial technologies, provides ample opportunities for scientists to perform large-scale spatio-temporal analyses of mobility patterns as well as investigate people’s mobile decision-making. Mobility pattern analysis is necessary for evaluating real-time situations but also for making predictions regarding future states. In addition, these analyses can help detect behavioral changes, such as the impact of people’s travel habits or novel travel options, possibly leading to more sustainable forms of transport. Mobile technologies help to identify individual-oriented problems and provide novel ways of user support. Examples will cover movement data analysis from two research projects in Switzerland within the context of multi-modal and energy-efficient mobility, as well as the analysis of human wayfinding behavior through mobile eye tracking and mobile decision-making support through gaze-based interaction.

Biografie

Martin Raubal is Professor of Geoinformation Engineering at ETH Zürich. He also serves as Director of Studies for Geospatial Engineering & Geomatics, Deputy Academic Director of the Master of Advanced Studies program Future Mobility and is a member of the Energy Science Center at ETH Zürich. Martin was previously Associate Professor at the Department of Geography, University of California, Santa Barbara, and Junior Professor at the University of Münster. He received his Dr. techn. in Geoinformation from Vienna University of Technology in 2001 with honors. Martin’s research interests lie in the areas of Mobility & Energy, more specifically in mobile Geographic Information Systems (GIS) & Location Based Services (LBS), spatial cognitive engineering, mobile eye-tracking, and GIS for renewable energy analysis. Martin is currently Co-Chair of AGILE (Association of Geographic Information Laboratories in Europe) and was a board member of UCGIS (University Consortium for Geographic Information Science) from 2008-11. He serves as Associate Editor of the Journal of Location Based Services, and on the editorial boards of Transactions in GIS, Journal of Spatial Information Science, Spatial Cognition and Computation, and Annals of the AAG. In 2008 Martin won the U.V. Helava Award. He has authored and co-authored more than 150 books and research papers published in refereed journals and conference proceedings.

Dieser Gast wurde von Johannes Schöning eingeladen.