Invitation to the Geo Colloquium

Spatial data analytics for sustainable mobility

Presentation by Prof. Dr. Martin Raubal

ETH Zürich

Abstract

The road to future sustainable mobility requires analyzing, evaluating and predicting people's mobility needs and their resulting consequences, such as greenhouse gas emissions. In this talk, I will argue why and how spatial data analytics supports our understanding of spatio-temporal mobility patterns and the prediction of individual mobility behavior. This further helps to determine the effectiveness of novel mobility services regarding reduction of CO_2 emissions, as well as the impact of people's behavioral changes. The importance of spatial data analytics will be highlighted by real-world case studies including Mobility-as-a-Service, smart charging of electric vehicles, and Vehicle-to-Grid optimization for car-sharing.

Prof. Dr. Martin Raubal

Martin Raubal is Professor of Geoinformation Engineering at ETH Zurich. He is also the Deputy Chairperson of the Center for Sustainable Future Mobility at ETH Zurich and a member of the Future Resilient Systems Management Committee at the Singapore-ETH Centre. Martin's research interests focus on spatial decision-making for sustainability, more specifically he concentrates on mobile Geographic Information Systems & Location Based Services, analyzing spatio-temporal aspects of human mobility, spatial cognitive engineering, and mobile eye-tracking to investigate visual attention while interacting with geoinformation and in spatial decision situations.

Date: Monday, 27.05.2024, 15:30 to 16:30 pm

Location: TU Wien, Wiedner Hauptstraße 8-10, 1040 Wien, Freihaus, 2nd Floor,

Lecture Hall HS04 (DB02O05)

Site plan