

Lecture series on the subject "AI, Data Science and Society"

4. Martin Raubal: Spatial Data Science for Sustainable Mobility

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Abstract

The constant rise of urban mobility and transport has led to a dramatic increase in greenhouse gas emissions. In order to ensure livable environments for future generations and counteract climate change, it will be necessary to reduce our CO2 footprint. Spatial data science contributes to this effort in major ways, also fueled by recent progress regarding the availability of spatial big data, computational methods and geospatial technologies. In this talk I will demonstrate how spatial data science provides opportunities for scientists to perform large-scale spatio-temporal analyses of mobility patterns as well as the employment of geospatial technologies for changing people's mobility behavior. Examples will cover movement data analysis within the context of multi-modal and energy-efficient mobility, and mobile decision-making support.