

Friday, 22 November 2013, 14:15–15:00, Géopolis 2230

Seminar in Computational GIScience

<http://igd.unil.ch/geocomp/seminar>

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Visualising movement trajectories in geoinformatics

Recent developments and ubiquitous use of global positioning devices have revolutionised movement analysis. Scientists are able to collect increasingly larger movement data sets at increasingly smaller spatial and temporal resolutions. These data consist of trajectories in space and time, represented as time series of measured locations for each moving object. In geoinformatics such data are visualised using various methodologies, e.g. simple 2D spaghetti maps, traditional time-geography space-time cubes (where trajectories are shown as 3D polylines through space and time) and attribute-based linked views. In this talk we present an overview of typical trajectory visualisations and then focus on space-time visual aggregations for one particular application area, movement ecology, which tracks animal movement.

Short biography: Dr Urška Demšar is lecturer in geoinformatics at the Centre for Geoinformatics (CGI), School of Geography & Geosciences, University of St Andrews, Scotland, UK. She has a PhD in Geoinformatics from the Royal Institute of Technology (KTH), Stockholm, Sweden and two degrees in Applied Mathematics from the University of Ljubljana, Slovenia. Previously she worked as a lecturer at the National Centre for Geocomputation, National University of Ireland Maynooth, as researcher at the Geoinformatics Department of the Royal Institute of Technology in Stockholm and as a teaching assistant in Mathematics at the Faculty of Electrical Engineering at the University of Ljubljana. Her primary research interests are in geovisual analytics and geovisualisation. She is combining computational and statistical methods with visualisation for knowledge discovery from geospatial data. She is also interested in spatial analysis and mathematical modelling, with one particular application in analysis of movement data and spatial trajectories.

<http://www.st-andrews.ac.uk/geoinformatics/people/faculty/urska-demsar/>



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