



Cartography M.Sc.

# OWN TOPIC

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Topic title : Designing and Evaluating an Interactive, User-Centered Geoportal for Subjective Travel Planning Using Map-Imitation Techniques to Visualize Perceived Distance

own topic - intended supervisor: Sacha Schlumpf, Prof. Georg Gartner

## Proposal

This thesis focuses on the design and evaluation of an interactive, user-centered web-based geoportal for subjective travel planning. Building on map-imitation and cognitive mapping concepts, the geoportal visualizes perceived distance and destination attractiveness based on user-defined preferences such as travel time and cost. Users can interactively generate personalized map visualizations rather than relying on fixed cartographic representations. The study evaluates how interactive map-imitation visualizations support travel decision-making compared to static maps. A qualitative user study investigates usability, user perception, and alignment with users' mental maps.

## Research Questions

- How do users perceive distance and destination attractiveness when using interactive, personalized map-imitation visualizations compared to static maps?
- How can map-imitation techniques be adapted to an interactive web-based geoportal to support subjective, user-defined representations of perceived distance?
- To what extent do interactive, personalized map-imitation visualizations align with users' mental maps and support travel-related decision-making?