

Master Thesis

Data Science with Mobility Data - Analysis of non-regular mobility

In order to advance the transformation of transport, it is crucial to understand today's transport behavior in detail. While our everyday mobility is already very well researched, there is still a lack of decisive insights into our non-regular traffic behavior. This includes, for example, weekend trips to the mountains or going on vacation. However, since this part of our mobility accounts for up to 50% of the total distance traveled per year and many Munich residents own their cars only for this type of mobility, it is crucial to lead the traffic turnaround to success.

As part of a research project, we are currently recording the mobility behavior of hundreds of citizens from the greater Munich area. The resulting new data set will be analyzed in this thesis and evaluated with regard to non-regular mobility. The resulting findings will then be compared and classified with other data sources such as the "Mobility in Germany" study.

Do you want to contribute to the solution of the traffic turnaround with your topic and apply the latest methods of data processing? Then this student research project is the right one for you.

The following work packages are included in the assigned student research project:

- Literature research and identification of the state of the art.
- Definition and differentiation of non-regular mobility from everyday mobility in terms of distance traveled, temporal occurrence and frequency
- Extensive data analysis of the new mobility dataset based on the definition of non-regular mobility in terms of space, time, purpose of the trip and the means of transport used
- Comparison of the found results with results of other, publicly available datasets
- Evaluation and discussion of the results

It is best if you bring previous knowledge for this work, or if you want to get trained in advance:

- Programming skills
- Basic knowledge of data analysis or the motivation to learn the subject in advance

If you have any questions, please don't hesitate to send an [e-mail!](#)

Please send your application including CV, grade report and around 100 Words of motivation to:

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