



Detecting activity purpose from mobile phone data

Problem description Mobile phone data have been getting popular for mobility research. However, activity purpose is yet lacking in these data. Such information is relevant to understand the reason of traveling, to know the functions of urban areas, and for service and retail companies to identify their customers. Therefore, the research will focus on detecting activity purpose from mobile phone data. The research is conducted in collaboration with Mezuro, a Dutch company specialized in analysing mobile phone data to understand mobility and with access to a database of Vodafone users' call detail records.

Assignment The assignment will start with a literature study. Next, you will focus on development of models relating the significant data features to activity purpose. Afterwards, you will apply models to derive activity purpose using the Mezuro database and finally validate the results.

Requirements The project will be conducted as TIL or CE/T&P MSc project. We are looking for a student who is passionate about data analysis and able to write database queries. The project will include an internship at Mezuro in Weesp.

Research group

Thesis promotor: Prof.dr.ir. Bart van Arem (b.vanarem@tudelft.nl)

Daily supervisors: Dr.ir. Gonçalo Correia (g.correia@tudelft.nl); Yihong Wang (Y.Wang-14@tudelft.nl).

External supervisor (from Mezuro): Jasper Keij (Jasper@mezuro.com).

Please contact Jasper, Yihong and Gonçalo for any information.