

DAAD GSSP 2020

Project 4

Optimal Design of the New Mobility Offer

Doctoral advisor: [Prof. Dr.-Ing. Bernhard Friedrich](#)

The design of car sharing services already takes into account the competitive situation with respect to public transport and is geared by limiting the number of vehicles permitted as well as a compensation fee for parking in public areas in the sense of traffic management. The definitions of business territory, offer density and pricing are based on expert opinions, without a quantitative evaluation based on explicit target criteria being available. In the future, this task of interpreting the mobility offer will become considerably more complex, as further offers including automated vehicles will be available on the market. It is also to be expected on the steering instruments side that both a set of new road regulations (limitations and privileges) and influencing measures (road tolls) will arise: These instruments will allow for a traffic management which gears differentiated measures with regard to time, space and vehicle characteristics. The aim of the PhD project is to develop explicit target criteria on the basis of which the new mobility offer can be optimally interpreted with the aid of a model-based approach.

The prerequisite for working on this topic is a sound knowledge in traffic planning, traffic engineering and modelling. Furthermore, knowledge of a programming language is expected.

