External Communication in Highly Automated Driving

Open Bachelor/Master Thesis

Background

Highly automated vehicles are about to be introduced. Such vehicles will then become players in a socio-technical system involving pedestrians, cyclists and other human drivers. However, most research has gone into technical solutions without special regard to the other players. How will these vehicles communicate with their surroundings?

Research Goal

The aim of this thesis is to investigate **what** kind of information should be provided to the external participant in such a socio-technical system and **how** to do this. A related work research should be conducted and interdisciplinary, learning psychological, didactic and information science approaches should be considered.

A virtual reality prototype should be designed and implemented that investigates several of these aspects. Finally, the defined hypothesis should be evaluated by conducting a study.

Based on bachelor/master level the scope is adapted.

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