Aiding Impaired People Through Autonomous Vehicles

Open Bachelor/Master Thesis

Background

Highly automated vehicles are about to be introduced at least for some use cases. Such vehicles will then become players in socio-technical systems involving pedestrians and other human drivers where some communication will be necessary. However, most research has gone into communication based on visual cues. This approach excludes some of the most vulnerable traffic participants, the visual impaired.

Research Goal

The aim of this thesis is to investigate how to aid impaired people in the future traffic. A related work research should be conducted and interdisciplinary and information science approaches should be considered.

A 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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