Adaptive Autonomous Vehicle Driving Style

Open Bachelor/Master Thesis

Background

Adapting the driving style of autonomous vehicles to a user's individual driving style can support acceptance and trust in the autonomous vehicle. The aim of this thesis is to prototypically implement the concept of an autonomous vehicle, which can learn a user's driving style. In addition, the driving style should adapt to the driver's state while driving. Example: If the user is anxious, the vehicle should reduce speed and increase the distance to the previous vehicle.

Research Goal

The aim of this thesis is to investigate how trust and acceptance is influenced if the driving style of an autonomous vehicle is adapted to the current state of a user. A prototype should be implemented in Unity and a user study should be conducted.

Based on bachelor/master level the scope is adapted.

Annika Stampf
Institute of Media Informatics
O27 / 3303

annika.stampf@uni-ulm.de