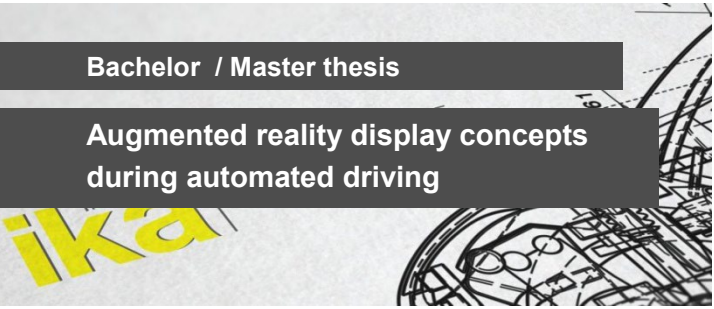
Student thesis



Bachelor / Master thesis

Augmented reality display concepts during automated driving

Topic and Goal of the Thesis

In the near future, partially or fully automated vehicles will be on our roads. The EMMI (Empathic Human Machine Interaction) research project addresses the task of adapting the HMI to the user's confidence level and thus increasing the acceptance of autonomous driving. In order to make the vehicle decisions transparent for the user, augmented reality displays can be used so that the information is visible directly in the user's field of view and thus becomes comprehensible.

Within the scope of this work, existing and future display concepts for the visualization of vehicle information in the windshield will be analyzed.

Working Points

- Literature research on current AR display concepts for highly automated vehicles (SAE level 4-5)
- Derivation of user requirements for AR display content
- Development of concept approaches according to user requirements

Requirements

- Good German language skills
- Reliability, commitment and enjoyment of working independently
- Interest in innovative display concepts in the field of “driving in the metaverse”

Department

Vehicle Concepts & HMI

Contact

Lena Wirtz

+49 241 80 25664

lena.wirtz@
ika.rwth-aachen.de

Language

German

Entry Date

Earliest possible date

Prior knowledge

Experience in vehicle HMI helpful