



AI Wait,
let me explain...

Interfaces for Explainable In-Vehicle AI

Open Bachelor/Master Thesis

Background

Drivers and passengers will be increasingly confronted with in-vehicle systems using AI (e.g., driver assistance (ADAS), speech-based co-pilot, or driving automation). However, such systems act as black boxes that make decisions, which are not always comprehensible to the user, especially in case of wrong decisions and faulty outputs. Therefore, explanatory in-vehicle interfaces may support users comprehending AI decisions and outputs. Still, it is unclear how such an interface should be designed and what information must be conveyed to explain AI decision-making.

Research Goal

This thesis aims to create an interface concept for explainable in-vehicle AI in automated vehicles. Related work research should be conducted, and a virtual reality prototype should be designed and implemented. Finally, the created interface should be evaluated by conducting a study.

Based on bachelor/master level
the scope is adapted.

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Images:

<https://www.guideautoweb.com/en/articles/51497/ihs-studies-reveal-people-are-confused-about-driver-assists/>