



# Macroscopic Effects of eHMI on Traffic

## Open Bachelor/Master Thesis

### Background

Autonomous vehicles will change the way we interact with such systems. As a driver could be missing, these vehicles will likely be equipped with, for example, displays to communicate with pedestrians or cyclists. But how will this effect traffic on a larger scale? Will traffic flow be higher? Will there be a reduction of CO2 gases?

### Research Goal

The aim of this thesis is to define requirements for a simulation of traffic with inclusion of varying degrees of eHMIs and to implement such in a traffic simulation (e.g., SUMO). This includes a literature survey on eHMIs and the definition of well-grounded assumptions on the future behavior of pedestrians.

Based on bachelor/master level the scope is adapted.

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