

Social Embeddedness of Autonomous Cyber Physical Systems (SEAS)

Überblick

The cross-faculty SEAS Research Training Group (RTG) studies in the application of Cyber Physical Systems in three safety-critical domains (mobility, energy and health care) and three explanatory dimensions (acceptance, cooperation and governance).

Laufzeit:

01. Juni 2019 - 31. Dezember 2023

Forschungsteam:

Prof. Dr. Susanne Boll (Projektleitung)

[Prof. Dr. Markus Tepe](#) (Projektleitung)

Details

This project explores the acceptance and cooperation of ACPS in the safety critical domain of mobility. Soon, there will be mixed traffic scenarios in which autonomous vehicles will coexist and cooperate with human traffic participants, including pedestrians and cyclists. Many interactions in urban traffic are not or only weakly legally regulated and observed. Instead, interactions of traffic participants are embedded in established social norms and practices. In this research project, we aim to understand the role of social norms for the recursive relationship between autonomous vehicles and the behavior of human traffic participants. How will automated and autonomous vehicles change social practices of cooperating in urban traffic scenario? Which social cues in addition to the technical signals of an automated vehicle are necessary for the acceptance of autonomous vehicles in daily road traffic? To answer these questions M1 draws on theoretical insights from behavioral social science and computer science. In methodological terms, M1 implements a rigorous set of experimental designs, ranging from large-scale online experiments to VR- and field-scenarios.

[Prof. Dr. Markus Tepe \(Principal Investigator & Speaker\)](#)

Prof. Dr. Susanne Boll (Principal Investigator & Speaker)

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Projekttyp:
Eigenprojekt

Projektpartner:
Carl von Ossietzky Universität Oldenburg