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Remote Control of Automated Vehicles

Open Bachelor/Master Thesis

Background

Until automation capabilities become so advanced that a truly autonomous service is supported, that is, path planning, path execution, interaction with vehicle users, moderation for varying needs, handling of all imaginable situations, and maintenance work planning, some degree of human supervision is necessary. Currently, the arrival of this future is not predictable. Therefore, to still benefit of the advancements in technology and with the pitfalls of supervising automation in mind, remote control is developed and evaluated both from a technical and a Human Factors perspective. In this potential collaboration, remote control interfaces intended for multi-vehicle and/or multi-supervisor should be developed, implemented, and evaluated.

Research Goal

The aim of this thesis is to define requirements for remote control of multiple automated vehicles. A user-centered design process shall be undergone, a prototype implemented, and a usability study should be conducted.

Based on bachelor/master level the scope is adapted.

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