ADP / MaTh Development of an Augmented Reality System for the Evaluation of Teleoperated Driving

Teleoperated driving is seen as a fundamental key factor for accelerating the introduction of automated driving. For the flexible design of test scenarios – concerning the teleoperation system of the research project MAAS – synthetic objects should be visualized in the transmitted videos streams, thus creating an augmented reality.

Task description

- Identification of requirements for the augmented reality system
- Familiarize with extrinsic and intrinsic calibration of the cameras
- Create synthetic objects
- Implement the synthetic objects into the video streams
- Test and Verify the developed method using suitable metrics and test cases

Qualifications

- Willingness to learn the Linux middleware ROS
- Experiences in programming with C++ and/or Python
- Experiences with openCV or other video manipulation software

NOTICE: All projects and theses at FZD can be done in English or German, as preferred.
ANMERKUNG: Alle Projekte und Arbeiten bei FZD können wahlweise in Englisch oder Deutsch durchgeführt werden.