

## *Development of Simulation Approaches for Degradation Effects of Lidar Sensors*

### Task Description

Research on the topic of perception sensor simulation in ADAS/automated driving is being conducted at the Institute for Automotive Engineering Darmstadt (FZD) in collaboration with Porsche. To this end, approaches for simulating degradation effects in lidar sensors will be investigated and developed.

### Task Details

- Research and familiarization with lidar sensors, perception sensor simulation, degradation and contamination effects
- Systematic collection of contamination and degradation effects
- Identification of simulation approaches using selected examples
- Exemplary implementation of selected simulation approaches

### Qualifications

- Experience with Linux and Git
- Programming experience in Python and C++
- Basic knowledge of lidar sensors

**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.**