Abstract:
A traffic light assistant on a smartphone is assessed in real traffic, with an eye tracking system. In one experimental condition, the system showed (intentionally) false information to the drivers to simulate a malfunction. The glances for this condition showed similar gaze parameters, as a working system. The subjective ratings of the test subjects after this malfunction dropped significantly. The gathered gaze data are compared to three former studies (two in a driving simulator and another study in real road driving). Findings indicate, that a driving simulator is a safe and reliable alternative to get some of the glance data (e.g., glance durations to the smartphone) without driving in real traffic.