

Threat assessment for road vehicles

Advanced active safety systems in vehicles may reduce the number of fatalities on the road in the future. These systems use sensory information related to the surroundings to assess the threat associated with the current situation. Depending on the threat level, collision avoidance or mitigation actions are chosen and automatically executed to support the driver. A number of approaches to estimate the threat have been introduced starting from simple time to collision measures to complex probabilistic models. The task of this seminar is:

- a literature survey and classification of threat assessment methods
- an evaluation in terms of weak points, applicable traffic situations, and computational efficiency of each method