

Design of Mechanism for Self-Driving Bikes

Bakgrund

In a research project the department develops self-driving bikes with the purpose to be used in test-driving experiments where vehicles' safety systems for bike safety are tested. Volvo Cars, Veoneer, Autliv and AstaZero are partners in the project. The bicycle drives pre-defined trajectories carrying a dummy to look as similar as possible as a real biker to the vehicle's sensor system. Designing the bikes contains several challenging tasks, and this project proposal concerns the mounting of the mechanism on the bike. The goal is to modify it, so that it can more easily be moved from one bike to another.



Problembeskrivning

The project task is to design and build a new mounting mechanism for the equipment making the bike self-driving. The new mounting mechanism should make it possible to use the equipment on different kind of bikes so that they can also be used as test objects. The new designed mechanism should be built and validated. The requirements on the portable system are different than the existing bike so there will be several interesting design tasks to be solved.

Målgrupp: TKAUT, TKMAS,

Gruppstorlek: 3-4

Antal grupper: 1

Förkunskapskrav: Till exempel vilka kurser?

Kontaktperson: Prof. Jonas Sjöberg, E-mail: jonas.sjoberg@chalmers.se

Handledare: Namn och email

Examinator: Namn och email

Projekt Rapport: Svenska / Engelska