



## You Spin Me Right Round - Using a Motorized Swivel Seat in Takeovers

### Open Bachelor/Master Thesis

#### Background

Highly automated vehicles enable the use of swivel seats as the driver is not involved in the driving task. However, the vehicle may still require the driver to take over, e.g., before a construction site. A motorized swivel seat can prime drivers for such takeover to enhance the driving performance thereafter. However, as the driver is not facing the road, it is unclear how fast the driver should be rotated, if/what should be displayed prior rotation, and whether the rotation speed can convey takeover urgency.

#### Research Goal

The aim of this thesis is to investigate how to prime drivers for a takeover and to make the takeover as relaxing as possible. A related work research should be conducted and a prototype using the existing SwiVR-Car-Seat (see left image) can be designed and implemented. Finally, the defined hypothesis should be evaluated by conducting a study.

Based on bachelor/master level  
the scope is adapted.

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