Haptic Steering Assistance Based on Prediction of the Future Trajectory in Line with the Intention of the Driver

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Introduction

This research explores the development and evaluation of machine learning models and a haptic steering assistance system which can predict future trajectory to assist human driver. Several driving experiments to evaluate the proposed system are conducted.

System Architecture



Driving simulator experiments

Several experiments were conducted on a driving simulator to compare manual and assisted driving. A Smart Eye, Pro eye tracking device, is used to collect driver's head and gaze movement



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