Docket #: S16-385

Steering Wheel Control Mechanism for Autonomous Vehicle

Researchers at Stanford have developed a method for instructing the steering system of an autonomous vehicle to perform a lateral steering action, e.g., when changing lanes or repositioning within a lane. The system allows the driver to use the existing steering wheel as an interface to suggest actions to the automated vehicle while it is driving itself. The method involves instructing the steering system to perform a lateral steering action depending on whether a steering wheel angle is greater than a threshold angle, and determining and applying an amount of torque based on comparing the steering-wheel angle to the threshold angle.

Related Technologies
Stanford docket S16-370 - Describing an interface that provides anticipatory steering information on the steering wheel to help drivers recognize a mistake by automation and react to it faster, improving vehicle safety.

Applications

- Automated road vehicles classified as SAE level 3 ("conditional automation") or higher

Advantages

- Utilizes the existing steering wheel to suggest actions while in automated mode, as opposed to a separate control device such as a joystick or touchscreen

Patents

- Published Application: 20180222523
- Issued: 10,538,268 (USA)

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