

Positioning for Autonomous Driving

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SUMMARY

This contribution will give an insight into sensors needed for advanced driver assistance systems (ADAS) as well as autonomous driving. Different levels of GNSS accuracy have to be fused with odometers, gyroscopes as well as accelerometers. Additionally radar, cameras and lidar are playing an important role to position the vehicle on the road and relative to other static or dynamic objects. Additionally lane accurate digital road maps are an important part for any vehicle positioning system to navigate but also to position the vehicle on the road. The presentation will highlight the requirements on the positioning infrastructure as well as the other geodetic challenges. The author expects an enormous impact on the geodetic education as well as on geodetic job perspectives. Geodesists will be a the winners of this development in the car manufacturing industry.