Porsche demonstrates autonomous driving in the workshop

25/02/2020 As part of a collaboration with “Kopernikus Automotive”, Porsche demonstrated how autonomous driving can be used in the workshop on a test field on the company's premises in Ludwigsburg. For the system, the partners rely primarily on artificial intelligence, which requires less sensor technology and reduces the costs of the technology.

A key element is the camera sensors. Before the vehicles drive truly autonomously in the workshop, the test site including the surrounding workshop environment was first converted into a virtual representation. This is used to train an artificial neural network. Here, autonomous driving is not programmed but the AI is “trained” using data. This is the only way the multi-faceted, complex system can be realised.

“This is a move away from sensors in the vehicle to sensors in the external environment, and a move away from relatively rigid programming to data-based intelligent systems,” says Alexander Haas, Project Manager for Automated Driving at the Porsche workshop, describing the essence of the technology.

The test field for autonomous driving comprises a customer service hall and its forecourt. The vehicle drives entirely autonomously from the parking space to the lifting platform and back. Mechanics use a tablet to maneuver the sports car to the correct position in the workshop, quickly and automatically.

The test proves the feasibility of autonomous driving in the workshop. This offers a wide range of advantages: thanks to automated vehicle handling, repairs can be performed more cost-efficiently and quicker. The test also enables Porsche to gather valuable information on artificial intelligence-based autonomous driving. In the long term, a host of further applications for the technology are possible: it can be used at ports, in logistics or in car parks in the future. After successful completion of the tests, the project team will pass the matter on to series production.

Porsche drives innovation in-house as well as together with external partners. The sports car manufacturer has been a partner in the Startup Autobahn innovation platform since 2017. The collaboration with Kopernikus Automotive also came into being thanks to this platform.

Link Collection

Link to this article
https://newsroom.porsche.com/en_US/technology/porsche-autonomous-driving-workshop-kopernikus-automotive-ai-20145.html

Media Package
https://pmdb.porsche.de/newsroomzips/1e0e764a-20a0-40e1-b01f-896d3565f27f.zip

Dr. Ing. h.c. F. Porsche Aktiengesellschaft
Porscheplatz 1
70435 Stuttgart