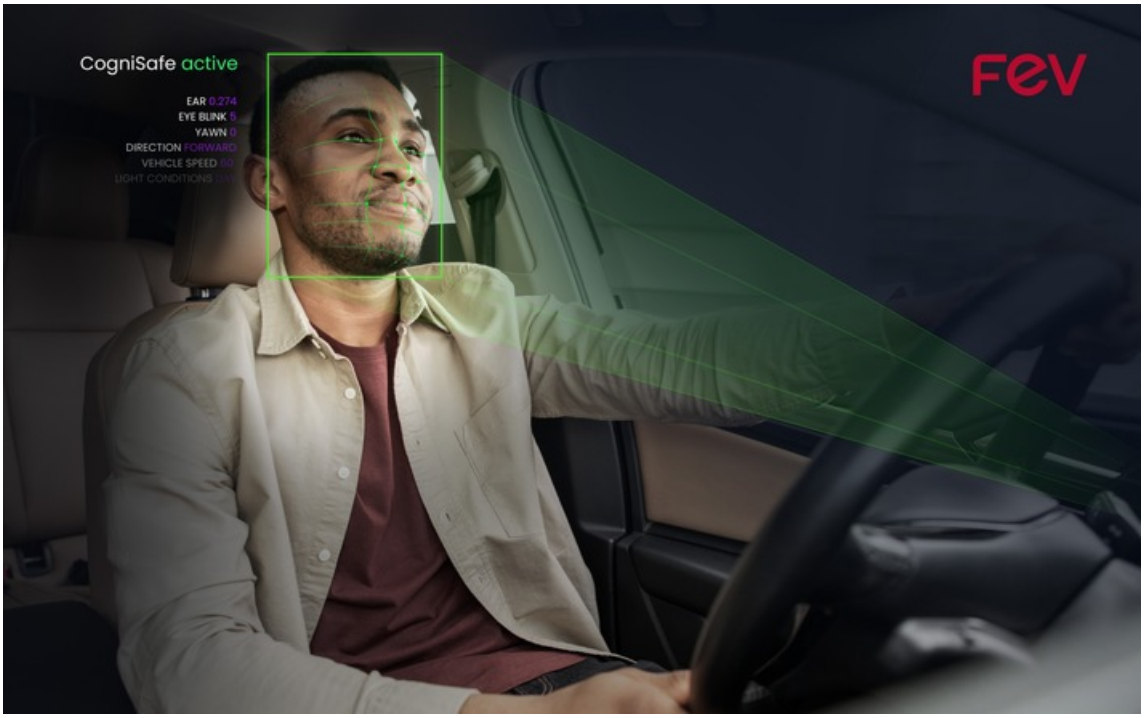
FEV Group

09.01.2025 – 11:00 Uhr

FEV develops AI-supported driver monitoring system CogniSafe



Aachen (Germany) (ots) -

FEV, a leading global innovation driver for the mobility of tomorrow, presents CogniSafe, a state-of-the-art Driver Monitoring System (DMS) that significantly increases road safety. The system uses advanced technologies such as deep learning and computer vision to monitor driver conditions such as distraction, fatigue and inattention in real time and under even the most challenging conditions.

“CogniSafe is a holistic, innovative system that uses a variety of sensors and combines them with artificial intelligence (AI) to precisely analyze driver behavior and alertness”, said Dr. Thomas Hülshorst, Group Vice President Intelligent Mobility & Software at FEV. In (semi-) autonomous vehicles in particular, legal safety requirements are increasing, and the driver must be able to intervene in any situation. “With our latest development, we are actively reducing accidents caused by human error. At over 90 percent, these make up the majority of all accidents,” said Hülshorst.

CogniSafe uses a combination of functions which are unique on the market and coordinate with each other. It uses a network of cameras in the visible light and infrared spectrum to analyze driver behavior from different angles. On this basis, the system continuously tracks the driver's gaze, analyzes eye condition (percentage of eye closure, PERCLOS) and assesses head posture, providing further information on alertness, fatigue and drowsiness.

AI plays a pivotal role in the functions of FEV's latest development. Convolutional Neural Networks (CNN) are used to perform precise real-time analyses that dynamically adapt to different drivers and environmental conditions, such as different lighting conditions, and continuously improve.

“The solution is also very interesting for target groups such as fleet operators or insurance companies, who have a strong interest in safe driving practices”, said Hülshorst.

Further information is available at https://shorturl.at/hy3dq

About FEV

FEV has always pushed the limits.

FEV is a globally leading engineering provider in the automotive industry and internationally recognized leader of innovation across different sectors and industries. Professor Franz Pischinger laid the foundations by combining his background in academia and engineering with a great vision for continual progress. The company has supplied solutions and strategy consulting to the world's largest automotive OEMs and has supported customers through the entire transportation and mobility ecosystem.

As the world continues to evolve, so does FEV.

That's why FEV is unleashing its technological and strategic expertise into other areas, applying its forward thinking to the aerospace and energy sectors. Thanks to its software and system expertise, the company also leads the way making intelligent solutions available to everyone. FEV brings together the brightest minds from different backgrounds and specialties to find new solutions for both current and future challenges.

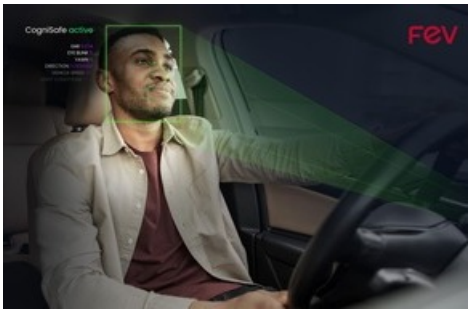
But FEV won't stop there.

Looking ahead, FEV continues to push the limits of innovation. With its highly qualified 7,000 employees at more than 40 locations globally, FEV imagines solutions that don't just meet today's needs but tomorrow's. Ultimately, FEV keeps evolving – to a better, cleaner future built on sustainable mobility, energy and software that drives everything. For the company's partners, its people and the world. #FeelEVolution

Contact:

Marius Strasdat
T +49 241 5689-6452
strasdat@fev.com

Medieninhalte



FEV's CogniSafe uses deep learning to monitor driver conditions, thereby increasing road safety. Source: FEV / More information via ots and www.presseportal.de/en/nr/147479 / The use of this image for editorial purposes is permitted and free of charge provided that all conditions of use are complied with. Publication must include image credits.