Attention resetting mechanism for driver distraction

Road safety statistics and the implied high toll on human life highlight the importance of research in the field of road safety, primarily through the improvement of driver behaviour, which is responsible for the vast majority of road accidents with deaths and serious injuries.

The phenomenon of driver inattention makes up a leading cause of road accidents and is a major issue for all stakeholders in road safety. The objective of this project is to develop a custom reset of attention software that will tackle the adverse effects of the vehicle factors on road safety.

To this end, simultaneous tracking of distraction and mental workload will take place, with the combined use of three technologies, tracking the driver's distraction, measuring physiological parameters, and recording driving performance indicators. Combining the three aforementioned technologies will provide novel insights into the issue of driver distraction, possibly revealing correlations between a wide range of factors, which can be considered a scientific breakthrough.

The distraction resetting software aims at using the physiological parameters measured and the eye movements tracked while driving to create sound signals or/and audible feedback in order to restore driver attention.

The proposed project has strong potential impact on a scientific, social and economic level, and can provide significant results which will substantially contribute towards creating the conditions for a more sustainable environment •

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