

MADSAV

Examines how to maintain driving skills in the age of (semi-) autonomous vehicles



INSPIRATION

By the year 2030 the majority of cars on our roads may be self-driving (autonomous). This radical change will alter the interaction between the car and the driver. In particular the car will assume a large responsibility for monitoring it's context and responding accordingly. However what happens if the driver needs to suddenly take back control especially if they have not driven a vehicle for a number of years?

The MADSAV project explores how we can monitor and encourage people to maintain their driving skills in the event of such handover situations. It specifically looks at issues such as driver profiling, in-car user interfaces, persuasive technologies and skills maintenance. It is also one of the first projects to address this particular challenge.

INNOVATION

During the project the partners will develop new systems which are designed to maintain skills using a range of approaches such as driver profiling tools and persuasive systems coupled with advanced user interfaces.

In order to support the research two types of studies will be conducted. In one case participants in Luxembourg and Austria will be equipped with a home study platform consisting of car steering wheel and PC based simulation environment. Other studies will be conducted under laboratory conditions.

Within this project LIST will be mainly involved in building a software platform - including testing and simulation system - in assessing driving skills through different studies and in developing algorithms for driver systems.

IMPACT

The project will deliver in a number of key areas:

- Profiling systems to accurately assess driving skills
- Persuasive technologies designed to encourage the maintenance of skills
- Advanced in-car user interfaces
- Simulation and testing platforms for use in home or under laboratory conditions

Partners

University of Salzburg (AT) , University of Luxembourg (LU)

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