

# Researchers design a new system to make overtaking safer on highways

July 6 2015

---



Researchers of the Universitat Politècnica de València have designed EYES, a new system for smartphones and tablets –now in the prototype phase– which aims to make overtaking manoeuvres safer on highways.

EYES provides visual help to the driver when he overtakes and it is also useful in monitoring manoeuvres for autonomous vehicles.

The application has been developed by researchers at the Group of Computer Networks of the Department of Computer Engineering (DISCA, in Spanish) of the UPV. "In scenes where overtaking entails a critical traffic manoeuvre, such as on two-way highways, low visibility lanes or in situations with large vehicles, this is a safety system able to help to reduce the number of accidents. Since it provides [real time](#) information, it allows the driver to make the decision to start overtaking at the right time," says Juan Carlos Cano, researcher at the Group of Computer Networks of the Department of Computer Engineering of the UPV.

EYES runs totally autonomously and with no driver intervention. When different validation tests are checked in order to guarantee the direction of the vehicles, the application receives and shows in real time on the tablet or smartphone the video of the highway seen by one of the vehicles ahead. Thus, it provides the driver further information to decide the best moment to overtake in low visibility situations.

For image transmission, EYES uses a system based on Wi-Fi technology, that establishes point-to-point connections between several vehicles in way that is very clear for the user. Thus, it does not depend on the use of 4G cellular communications systems.



"EYES provides a better vision of the highway and every [vehicle](#) travelling in the opposite direction. And it is particularly useful when large vehicles block the frontal view of the driver, so it could reduce the risk of accidents. It is an innovative system that could be within anyone's reach", explains Juan Carlos Cano, researcher at the Group of Computer Networks of the Department of Computer Engineering of the UPV.

Provided by Asociacion RUVID

Citation: Researchers design a new system to make overtaking safer on highways (2015, July 6) retrieved 20 March 2024 from <https://phys.org/news/2015-07-safer-highways.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.