

ShowCase

Intel-Mobileye, the new tool that provides autonomous driving with greater safety

Products

Responsibility Sensitive Safety system developed by Mobileye.

Results

Recognize the fault in the case of collision of autonomous vehicles.

Improve safety when driving autonomous vehicles.

Project Details

Mobileye, acquired by Intel with a billionaire maxi-operation, is certainly one of the most active companies on the self-driving front, being specialized in automated technology and having the world leadership in the supply of cameras for advanced driver assistance systems (Adas, Advanced Driver Assistance System, ed.).

<https://www.mobileye.com/>

Introduction

The recognition of guilt in traffic accidents is a fundamental aspect nowadays. In the case of autonomous driving, this fact is somewhat difficult to attribute and verify. Like the best human drivers, vehicles with autonomous driving can not avoid accidents due to actions that are out of their control, although causing them is something really complicated for them since they have a 360-degree vision and really fast reaction times. The recent acquisition of Mobileye by the Intel group will allow Mobileye's leading artificial vision experience to be complemented by Intel's high-performance computing and connectivity experience.

Challenges

The main objective of this project is to devise a mechanism to avoid accidents in the case of vehicles that have autonomous driving, operating in a responsible manner and so that they can not be guilty of the same.

Solution

The solution to this problem has been developed by Mobileye N.V., which has recently been purchased by Intel in order to accelerate and improve safe autonomous driving. This solution is a system of artificial vision and automatic learning, which analyzes data, locations and mapping for advanced systems of driver assistance and autonomous driving. This new technology allows to improve the safety of passengers on the roads, reduce the risk of accidents, save lives and allow autonomous driving. The software algorithms patented by Mobileye and EyeQ chips allow detailed interpretations of the visual field in order to avoid collisions with other



vehicles, patones, cyclists, animals, etc. They also detect road markings, identify, and read traffic signs, directional signs and traffic lights.

The Responsibility Sensitive Safety Model proposes specific and measurable parameters for the human concepts of responsibility and precaution and defines a state of safety for which the autonomous vehicle can not cause an accident, independently of the measures taken by other vehicles.

References

- <https://newsroom.intel.com/news-releases/intel-mobileye-acquisition/>
- <https://www.internet4things.it/smart-car/intel-mobileye-la-guida-autonoma-diventa-scienza/>