Application acceleration made simple

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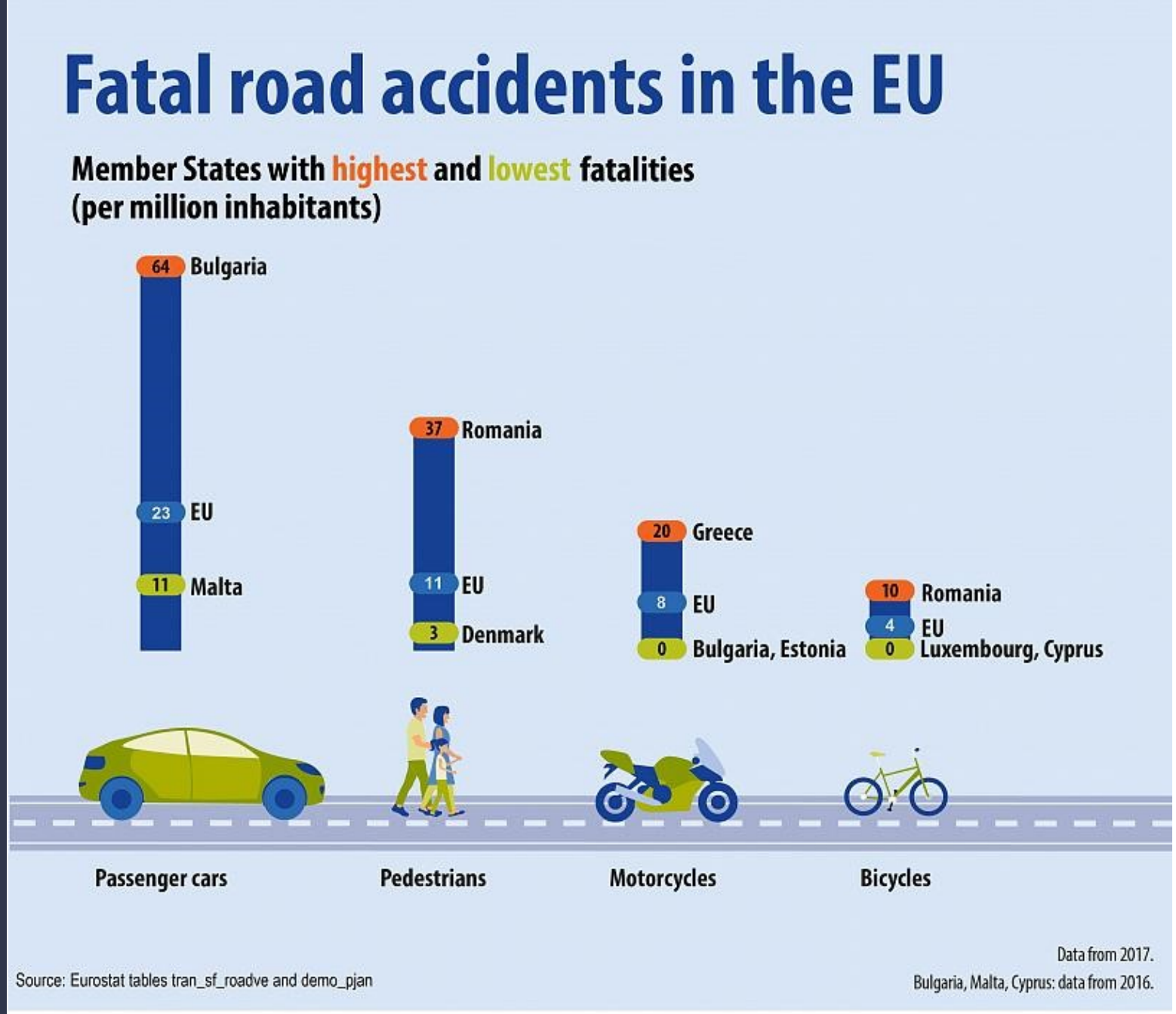

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200 fatal road accidents from **motorcycles** in Greece per year

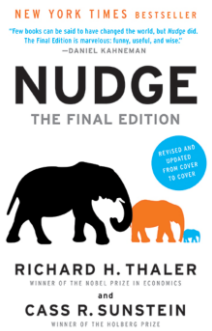
The problem

Motorcycle crashes account for a disproportionate number of motor vehicle deaths and injuries in the U.S and Europe.

Motorcycle **helmet use** can lead to an estimated **42% reduction in risk for fatal injuries** and a **69% reduction in risk for head injuries**.

The power of nudge

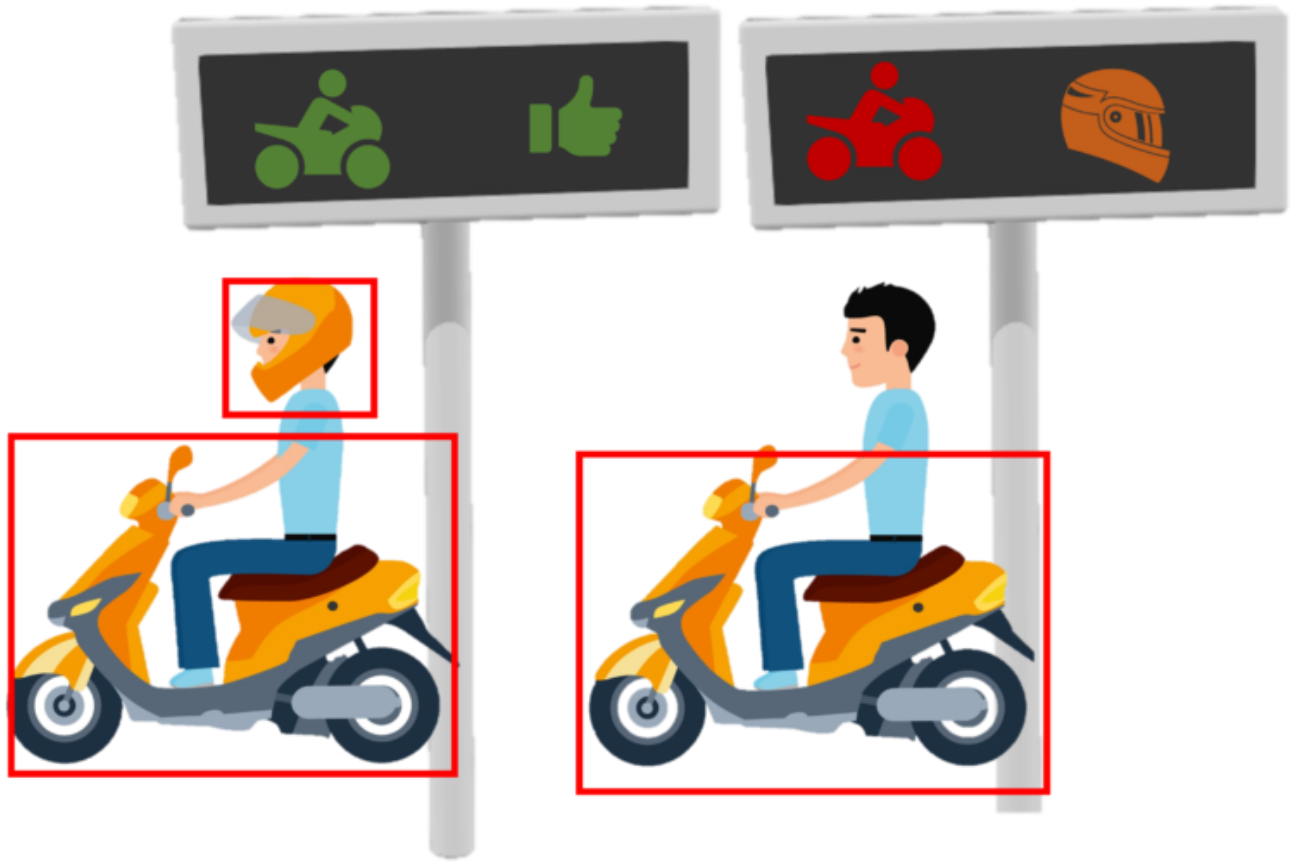
Usually the best way to urge the use of safety equipment is through **positive encouragement** and not with penalty fines.



Encourage use of helmets

SafeDisplay **automatically recognize if motorbike riders wear helmets** and **show the information on the display** to encourage the riders to wear helmets.

Using advanced machine learning and computer vision, SafeDisplay can automatically recognize the motorbike and the use of motorbike helmets.

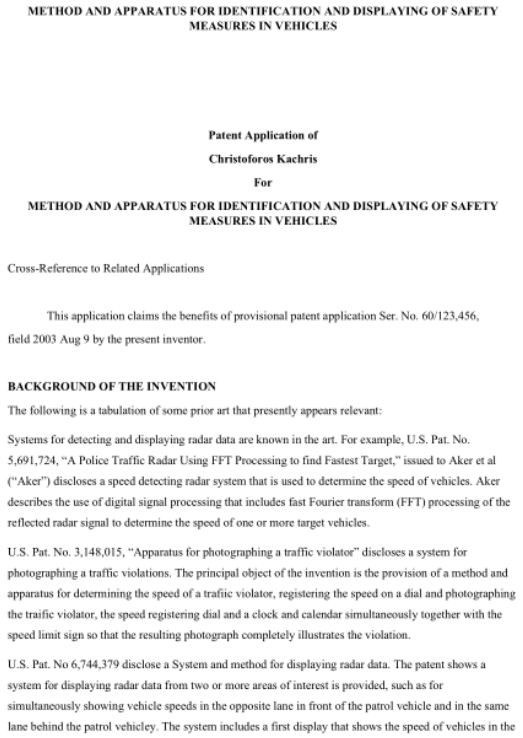


https://inaccel.com/safedisplay

The technology

SafeDisplay uses **advanced machine learning and computer vision** to automatically identify motorcycles and helmets on the riders.

Using state-of-the-art machine learning models and advanced **accelerated hardware**, SafeDisplay identifies the use of helmets and encourage the use of helmets by motorbike riders.



METHOD AND APPARATUS FOR IDENTIFICATION AND DISPLAYING OF SAFETY MEASURES IN VEHICLES

Patent Application of

Christoforos Kachris

For

METHOD AND APPARATUS FOR IDENTIFICATION AND DISPLAYING OF SAFETY MEASURES IN VEHICLES

Cross-Reference to Related Applications

This application claims the benefits of provisional patent application Ser. No. 60/123,456, field 2003 Aug 9 by the present inventor.

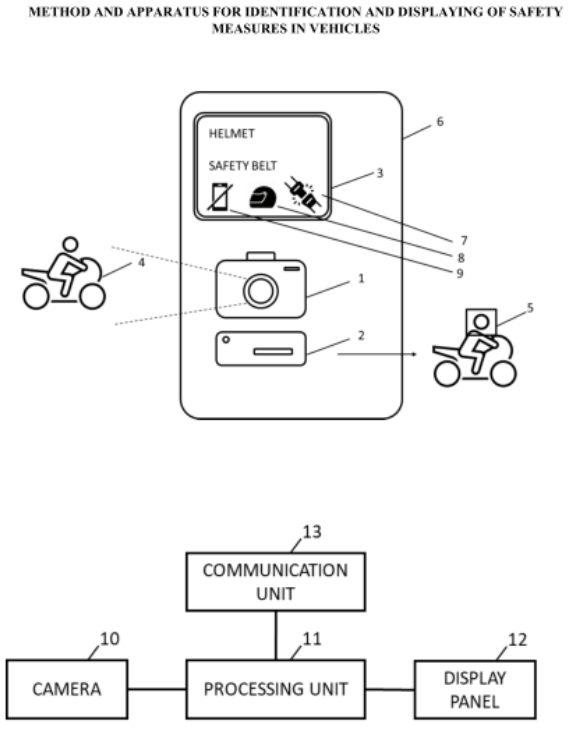
BACKGROUND OF THE INVENTION

The following is a tabulation of some prior art that presently appears relevant:

Systems for detecting and displaying radar data are known in the art. For example, U.S. Pat. No. 5,691,724, "A Police Traffic Radar Using FFT Processing to find Fastest Target," issued to Aker et al ("Aker") discloses a speed detecting radar system that is used to determine the speed of vehicles. Aker describes the use of digital signal processing that includes fast Fourier transform (FFT) processing of the reflected radar signal to determine the speed of one or more target vehicles.

U.S. Pat. No. 3,148,015, "Apparatus for photographing a traffic violator" discloses a system for photographing a traffic violations. The principal object of the invention is the provision of a method and apparatus for determining the speed of a traffic violator, registering the speed on a dial and photographing the traific violator, the speed registering dial and a clock and calendar simultaneously together with the speed limit sign so that the resulting photograph completely illustrates the violation.

U.S. Pat. No 6,744,379 disclose a System and method for displaying radar data. The patent shows a system for displaying radar data from two or more areas of interest is provided, such as for simultaneously showing vehicle speeds in the opposite lane in front of the patrol vehicle and in the same lane behind the patrol vehicley. The system includes a first display that shows the speed of vehicles in the

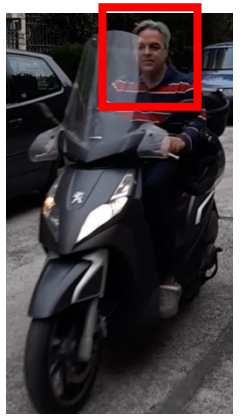


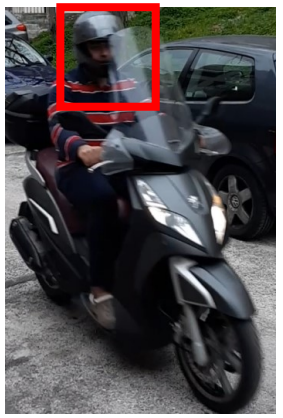
Patent pending, (submitted Dec 2021, USPTO)

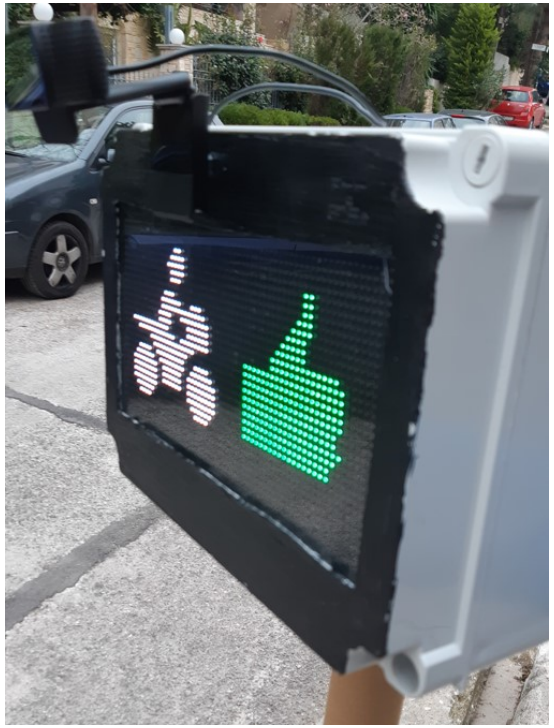
Product: Pilot use

Easy to install as any road sign.

Based on Advanced ML algorithm and Google Coral TPU hardware accelerators.







https://www.youtube.com/watch?v=ipe9hyptOmY

Pilot use on Athens

- In collaboration with Municipality of Ilioupoli (Athens suburb) the device has been installed in one of the streets of Ilioupoli.
- The region of Attica has shown interest to be installed on several road on the greater region of Athens.

(flickering of the photo is due to the refresh rate of the display)

Potential deployment

- City streets with high accident rate
- Main streets
- Close to universities
- Close to delivery spots

InAccel, Inc. Corporate overview

- Founded in January 2018 (Seed fund: $600 USD in June'18)
- Registered in Delaware, USA
- Membership:

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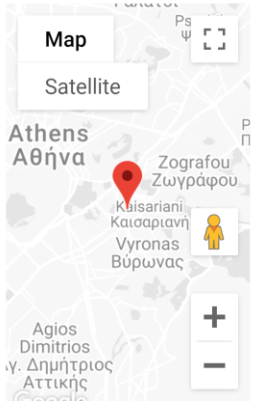

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