Autonomous cars

Who should be held legally accountable in the event of an accident involving an autonomous car?



Ruaridh Hepburn July 2020

The five levels of vehicular autonomy

A single aspect is autom

Cruise Control, lane assis The vehicles speed is controlled by the car, not driver

Driver is mostly hands off

The car has potential to complete all but the most complex of driving tasks by tself, driver hands off for long periods Driverless cars, fully autonomous, everywhere.

No manual override required,ever, no steering wheel or pedals. Interface with car only via voice or app

Level 2

Level 4

Level 1 Level 3

Multiple functions are automated

Lane change, self parking, gps and radar assisted steering and braking

Level 5

Car is fully autonomous (in selected areas)

Car will not only detect but communicate with other vehicles, genuine hands off driving 99%+ of time.

Liability





The problem with Autonomous Vehicles is.....

Al is imperfect

Just like the humans that build them, machine learning algorithms are flawed.

No black box

It's easy to record the WHAT decisions are made, but very hard to record why.

Security

A car connected to the internet is vulnerable to digital attack.

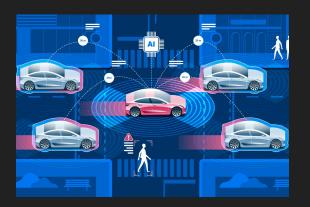
Solutions

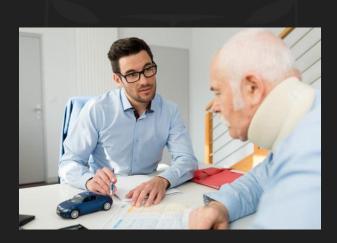


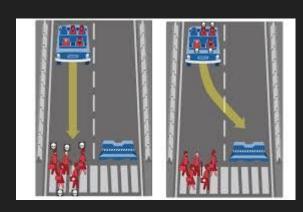




Why none of this actually matters







automated technology can prevent the crashes that are related to human error, and there is a pretty hard number that's about 94 percent of fatal crashes in the US are attributable, or caused by, human error," said John Maddox, CEO of the American Center for Mobility.

"I think that most people, most experts, would

say that there's a strong possibility that

Sources

https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812115

https://www.youtube.com/watch?v=ycPr5-27vSI

https://www.nature.com/articles/d41586-018-07135-0

https://www.insurancebusinessmag.com/uk/news/auto-motor/top-10-car-insurance-companies-in-the-uk-211365.aspx

https://www.theatlantic.com/technology/archive/2018/12/7-arguments-against-the-autonomous-vehicle-utopia/578638/

https://spectrum.ieee.org/cars-that-think/transportation/self-driving/people-want-driverless-cars-with-utilitarian-ethics-unless-theyre-a-passenger