

Autonomous and connected car security challenges



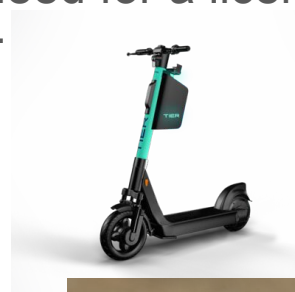
Autonomous car have many problems:

- Malicious remote control.
- Capitalist interests: the optimal path.
- Technology not perfect yet see: https://en.wikipedia.org/wiki/Self-driving_car#Incidents
- Ecological problems: rebound effect, no need for a licence, everybody with enough money can use it.
- Moral problems: Who should be saved ?

Autonomous cars still have many benefits:

- Synchronised driving.
- No alcohol.
- Not tired.
- No reckless driving.
- Perfect respect of the traffic law.

Autonomous cars can clearly be safer than human drivers, *in theory*



Ideas for solving the security problems presented in the article

Secure network access and programming:

- Like a typical end user device, a car should not accept incoming connections.
- System software of the autonomous car should be programmed with a memory safe language (java, python, *rust*).

Standardization:

- Autonomous car should have a standardized interface for interaction with the external world.
- Controversial: The “autonomous” part of the car should be the same across all models, to give predictable behavior.

