Presentation Review Article

GrJa23

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Problem it tries to adreess / Presented

The article that has been reviewed is an article from "@Teraki" that has been published in May 2019 in Medium application: "Autonomous Cars' Big Problem: The energy consumption of edge processing reduces a car's mileage with up to 30%"

https://medium.com/@teraki/energy-consumption-required-by-edge-computing-reduces-a-autonomous-cars-mileage-with-up-to-30-46b6764ea1b7

Information about Teraki: Teraki is a company located in Germany (Berlin) developing an artificial intelligence and edge processing platform. It's AI-powered software product operates at the embedded level and delivers for automotive and IoT applications (such as drones, robots, smartphones) for which they lower latencies, reduce costs and enhance machine learning accuracy with 10%-30% vs. state-of-the art.

Structure of the Article

Using available data from the US Gov.:

1. Energy Capacity for a selection of cars
2. Attainable mileage: showing proportionality & more consumption in cities
3. Divide 1. by 2. to get the energy per 100 miles
4. Time a car is able to drive with a full charge: using assumption on average speed
5. Energy consumption on AD at L4/L5 * duration of the ride: making assumption on the power consumption when being in AD t L4/L5
6. Divide the energy needed by a car on AD at L4/L5 with the energy stored in the full battery: Define the % of the battery that is consummed by activating the AD at L4/L5
7. Estimatate of the mileage reach if the AD at L4/L5 is activated

=> Conclusion: it is showing the importance of optimizing the usage of CPU, GPU and more importantly AD-sensors to maintain a good level of battery consumption whilst being in AD at L4/L5.

Problem it tries to adress / Presented

Challenging the communication and expectations made by car makers to justify their investments.

- Bullet 1
- Bullet 2
- Bullet 3

1. Item
2. Item

To what extent it adresses the problem effectively

- Bullet 1
- Bullet 2
- Bullet 3

Whether it unlocked other usages/problems

- Bullet 1
- Bullet 2
- Bullet 3

This - Scenario 1 - Scenario 2 - Scenario 3

Slide with R Output

```
summary(cars)
```

```
##      speed           dist
##  Min.   : 4.0   Min.   :  2.00
##  1st Qu.:12.0   1st Qu.: 26.00
##  Median :15.0   Median : 36.00
##  Mean   :15.4   Mean   : 42.98
##  3rd Qu.:19.0   3rd Qu.: 56.00
##  Max.   :25.0   Max.   :120.00
```

Slide with Plot