Task 6

Csd4406 Mike Bastakis / csd4423 Lefteris Ntafotis / csd4502 Manos Kalozimis

Topic "Autonomous Driving and Ethical Concerns"

Source 1 Link: https://www.sciencedirect.com/science/article/pii/S2352146518302606

- Road traffic will be improved with autonomous driving.
- There are still problems/difficulties that need to be resolved to release these products in the market.
- Scientists believe that these autonomous should work cooperatively.

Source 1 Evaluation: It is reliable/accurate because the author is a scientist who backs up all of his/her claims with research material and experiments/facts.

Source 2 Link: https://www.nature.com/articles/d41586-018-07135-0

3 Main ideas

- Moral Compass
- Moral judgements that human drivers make routinely
- Moral Machine can help improve driving experience

Source 2 Evaluation: Why is it accurate/reliable?

This article was released in the Nature news paper that has done research in the field of self driving cars. Nature has also released a lot of other papers concerning this matter. Their references are:

1. Greene, J. *Moral Tribes: Emotion, Reason and the Gap Between Us and Them* (Atlantic Books,   London, 2013)
2. Tomasello, M. *A Natural History of Human Thinking* (Harvard Univ. Press, Cambridge, 2014)
3. Cushman, F. & Young, L. The psychology of dilemmas and the philosophy of morality. *Ethical Theory Moral Pract*. **12**, 9–24 (2009)
4. Asimov, I. *I, Robot* (Doubleday, New York, 1950)
5. Bryson, J. & Winfield, A. Standardizing ethical design for artificial intelligence and autonomous systems. *Computer* **50**, 116–119 (2017)

And many more.

Source 3 Link: https://www.technology.org/2019/02/26/top-5-dangers-of-self-driving-cars/

- The radiation will destroy our brains.
- Roads are not suitable for self-driving cars.
- Terrorists may hijack the cars in order to create chaos.

Source 3 Evaluation: This is not a reliable article as the author appears to have no idea about technology in general, therefore not automated cars and ethical dilemmas either. The author does not present a single scientific research to back his claims, resulting in an article about opinions/science-fiction and not reality.

Source 4 Link: https://ethics.org.au/why-ethics-matters-for-autonomous-cars/

3 Main ideas (mention briefly)

- It talks about the Ethical Dilemma that self driving cars produce.
- Explains that those cars must have ethics built in to them.
- Why self driving cars will never be sufficient.

Source 4 Evaluation: Why is it accurate/reliable?

This article draws information from a lecture of TED EX and it is written by the ethics centre.

Source 5 Link: https://theconversation.com/the-everyday-ethical-challenges-of-self-driving-cars-92710

- How racial bias can often take place in something as simple as a car approaching a crosswalk when a human is behind the wheel and how such behavior should not be passed on to autonomous cars.
- What the correct balance of speed, braking, turning is to maximize not only the safety of other pedestrians, drivers, and the passengers of the car but also its environmental impact and emissions.
- Traffic systems that were made for human drivers are not as efficient or even as safe as an automated, programmed system is where cars can communicate with one another, potentially eliminating the need for traffic lights, crosswalks and road signs.

Source 5 Evaluation: The article doesn't pose shallow arguments about ethics and scenarios relying on some version of the classic "Trolley problem" that is often brought up when discussing the morals and dilemmas behind autonomous vehicles. On the contrary, the author makes some very sound observations, quoting research where appropriate, otherwise bolstering his points with examples from every-day life and well placed arguments.