

Autonomous Vehicles Ethical Issue

Ethics in Information Technology: A Critical Analysis

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I. INTRODUCTION

What are autonomous vehicles? They are broadly vehicles with technology able to sense conditions around it like traffic, pedestrians, and physical hazards with the ability to adjust its course and speed without a human at the controls [1]. What is the ethical issue from this?

Autonomous vehicles cannot make ethical decisions such as what to collide the same way as us with their robot-like design [1]. Some ethical dilemmas are colliding with a person or colliding with animals, [1] self-safety versus utilitarianism [3], or stopping for an emergency vehicle to pass versus going. Autonomous vehicles are also known as ADVs [4]. Is there potential to have a definite answer to solving that ethical issue with many ethical dilemmas stemming from it?

II. ANALYSIS OF ETHICAL FRAMEWORKS BASED ON ARTICLES

The evaluation of rule utilitarianism meaning rules should only be adopted that if followed by everyone, leads to the greatest increase in total happiness for all affected parties indicates that utilitarianism in general considers the best action the one that produces the most good, people would generally like to see more utilitarian cars on the street based on article [3], as they are positive toward buying cars that protect pedestrians and minimize life loss overall [3]. This matches the idea of rule utilitarianism as finding out how people feel is important for determining happiness [3]. However, accepting this behavior is not clear as well since some people would prefer to potentially but self-safety cars instead [3]. This represents an ethical dilemma since if utilitarian ethics dictate the behavior of the car, then people may not buy them, as their own car would harm them to save strangers [3]. Generally, because the survey indicates people would generally like to see more utilitarian cars on the street while less people want to have self-safety cars, it is possible the best action through rule utilitarianism indicates that both types of cars should exist as options for people to buy so that both sides of people are happy [3].

Act utilitarianism means the action is good if its benefits exceed its harms. In regards to the question of solving the autonomous vehicles not being able to make ethical decisions question, act utilitarianism will be evaluated. Article [4] indicates that utilitarian actions maximize utility by seeking to cause as little overall damage as possible, based on some probabilistic view of the future, which matches act utilitarianism the most trying to do actions that

have benefits exceed its harms [4]. One scenario is the choice to always save one's own life in a critical situation affecting the future of other road users [4], similar to the self-safety versus utilitarianism dilemma [3]. All ADVs would have to act in a utilitarian way in traffic for this to be true however, as an ADV focusing on self-safety may push a schoolbus full of children into an abyss to ensure safety of its own passenger however [4].

III. GARY YOUNG'S POSITION ON THE ISSUE AND HIS APPROACH TO TAKE

Gary's position on the issue is that act utilitarianism and rule utilitarianism combined together would not work out well in regards to the self-safety versus utilitarianism dilemma because act utilitarianism would mean all cars would have to act utilitarian while rule utilitarianism would mean some cars would be acting utilitarian based on demand [4]. His course of action for this dilemma would be in favor of rule utilitarianism to give people freedom and the option to choose as that is generally how most companies in the United States are set up like.

For the hitting a person versus hitting an animal dilemma, Gary would want ADVs prioritize hitting animals over any person to follow Germany's law on that, and because in general, he thinks that since we are human in the end, human lives are the first priority above any other species, and he thinks act utilitarianism should be used to enforce this in all ADVs [1].

For the stopping for an emergency vehicle to pass versus going dilemma, Gary would want ADVs by default to keep going for emergency vehicles to pass as traffic flow is better than no traffic flow, but if other vehicles are making a way, the ADV should stop and do that, so act utilitarianism should be used to enforce this in all ADVs so that rule utilitarianism is followed at the same time making more people happy in the end that an emergency vehicle can do business.

IV. CONCLUSION

In conclusion, there is no direct answer to the "Is there potential to have a definite answer to solving that ethical issue with many ethical dilemmas stemming from it?" ethical issue question for 1 dilemma, while 2 dilemmas indicate yes. For the self-safety versus utilitarianism dilemma, act utilitarianism indicated both by Gary and the articles would set up ADV laws to be different than rule utilitarianism [3]–[4]. For the hitting a person versus hitting animals dilemma part of the question, Gary supports hitting animals and that this should be enforced in all ADVs using act utilitarianism [1]. For the stopping for an emergency vehicle to pass versus going dilemma, Gary thinks by default ADVs should keep going but stop and make way when other vehicles are doing so, wanting to follow both act utilitarianism and rule utilitarianism.

Bibliography

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