**ARE AUTONOMOUS CARS SAFER THAN HUMAN DRIVERS?**

Autonomous cars were developed following the upgrading and advancing of technology in automotive industry. Without a driver, an autonomous car is made safe by its multiple sensors that obtain data from the surrounding, with relatively fast response time than human (Hammerschmidt, 2019). Nonetheless, autonomous cars are not as safe as human drivers due to the lack in artificial intelligence and car system security.

Autonomous cars are not safer than human drivers due to lack in artificial intelligence in handling different road conditions. Problem arises when the system fails to make correct decision in unpredictable event. There are cases that autonomous cars not act as predicted in specific traffic scenario when they are unable to interact effectively with other traffic components such as cyclists and pedestrians (Luuk Vissers, Sander, Ingrid, Prof. Marjan, 2016). Their operations are also limited to certain roads with proper infrastructure built.

Besides, autonomous cars are lack in car system security and vulnerable to cyber hacking. This may cause serious impact when hackers are able to take control of the vehicle, including but not limited to engine, steering, braking and acceleration that lead to an accident (Dr. Jane LeClair, 2020). In fact, it was reported more than 1.4 million cars were recalled in 2015due to similar vulnerability (Bowles, 2018).

Some people may claim that autonomous cars are safer by eliminating driver error that contributed largely on car accidents based on statistics (Singh, S.,2015). However, the statistics is unfair where most autonomous cars tested are not facing extreme and hazardous environment that human drivers do (Peter Hancock, 2018). For instance, unsatisfying road condition, awful weather, and vehicle malfunction. Therefore, that is not enough evidence to show autonomous cars are safer.

Despite the presence of autonomous cars seems able to prevent accident caused by driver error, there are still some technical issues involving system security and intelligence need to be upgraded in order to build safer autonomous cars in the future.