Self-Driving Cars

Alfonso Reed, Richmond Sakie, Demonyae Smith

UMB CURE Scholars Program - Sixth Grade Cohort 3, Southwest Baltimore Charter School, Baltimore, MD
Marlene and Stewart Greenebaum Comprehensive Cancer Center, University of Maryland, Baltimore

Purpose of Study

To examine the recent discoveries and innovations in the field of self-driving cars.

Introduction

Tesla Motors released their autopilot feature in 2014 which allows their cars to drive themselves. The self driving cars are important because the self driving cars have more driving knowledge than humans. Humans sometimes drive recklessly, but self driving cars can stop their car crashes and carelessness. These cars also don't get lost, don't speed, and don't hit pedestrians.

Public Perception

Some people think that self driving cars may cost too much money. One self driving car cost up to $1.16million. Tesla vehicles cost between $80,000 and $150,000. However, these cars can drive by themselves so some people would want these cars. Some companies, such as Uber and taxis, don't want self driving cars. With self driving cars people will not need Uber and taxis. This can also cause unemployment among people whose job requires driving.

Discoveries and Innovations

Self driving cars use LIDAR signals which stands for Light Detection and Ranging. This means the self driving car uses light to detect objects around it.Scientists can use information found by testing out the self driving cars. They recorded the total miles driven and the total number of accidents. The scientists found that there was an average of 15 accidents per month

Applications in Medicine

Self driving cars have the potential to reduce and prevent traffic accidents. When the self driving car is going too fast and it almost hits a car, the self driving cars will automatically stop. It also drives for people and they do not have to worry about controlling the car on their own. We can have self driving ambulances and fire trucks. These cars can be more safe than human drivers. For example, a guy named Joshua Neally suffered a pulmonary embolism in his moving car on a highway in July. He happened to be driving a new Tesla Model X with an autopilot function which took him to the nearest hospital.
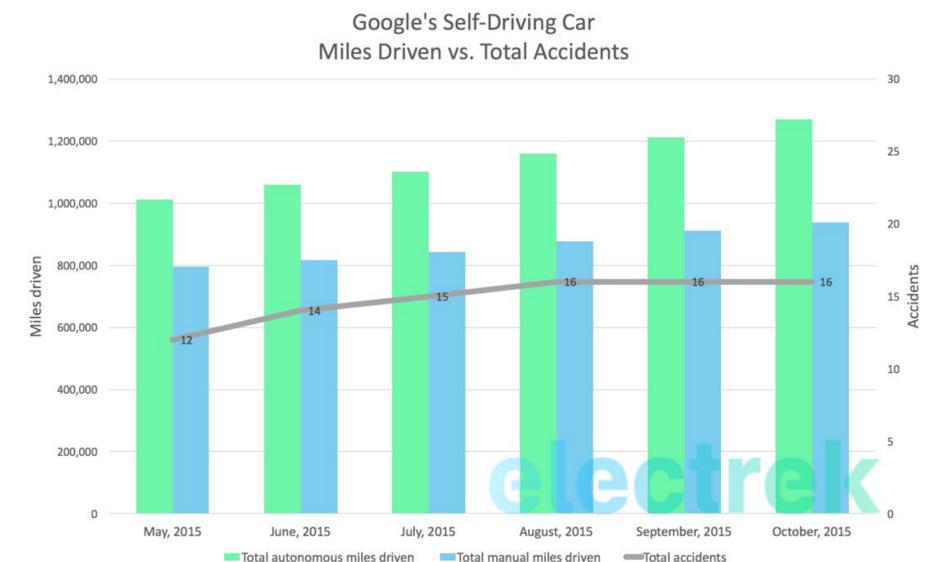
Data

Figure 1. Self Driving Car Accidents

Conclusion

In conclusion, self driving cars will have a major impact on human lives. Self driving ambulances and firetrucks can exist in case there are not drivers and someone is in danger. There will be a big decrease in accidents with self driving cars. A downfall with self driving cars we should all be aware of is the driving sensor malfunctioning during snowy conditions. More research needs to happen.

References

1. https://electrek.co
2. https://waymo.com/