



# Driverless Cars

# How would it work



- A driverless car would use sensors to see other cars nearby. Use video cameras to see signs, lights, or other stuff on the road. They also can use ultrasonic sensors inside the wheels to detect objects when parking. Lidar is a type of sensor that the car must use to see the lines on the road.

# Levels

- Driverless cars are compared by their levels, let's start at level 0 and continue. **Level 0** is nothing but a usual car. **Level 1** is mainly controlled by humans but uses the brakes automatically for safety. **Level 2** unlike level 1, this car can steer itself instead of only using the brakes. And **level 3**, manages all the safety controls but is mostly controlled by the human. **Level 4** is like level 3 but can control the car but not all the controls. Lastly, **level 5** can use all the controls.



Pros

## Human Error No More

Computers take away the possibility of human error and distractions whilst driving. That motorbike you didn't spot? The car's computer did. It's likely there will be less accidents and reduced fatalities on the road, the biggest pro.

## No Road Rage

Adults experience road rage at some point in their lives. Whether they're usually the culprit or on the receiving end of it, it will be gone. Computers won't do tailgating, and they don't have middle fingers. That means a lot less road rage.

## Disabled and Elderly Get The Help They Need

Driverless cars will allow for disabled and elderly to get around easier. Driverless cars mean added freedom and less requirement on others or forms of transport.



The police can focus on important crimes since traffic incidents, speeding and careless driving should be a thing of the past with a driverless car

## Police Time Better Spent



## Late? Not A Problem

Late for the date or business meeting? No worries, your self-driving car could drop you off at your destination and park itself, while you get a move on.





Cons

## Hacking Potential

Increasingly connected vehicles means they are more vulnerable to the threat of hackers, who might be able to take over control of the cars and locations you have visited including your home



## The Fate of Taxi

With driverless vehicles, there is the possibility of taxi drivers losing their job



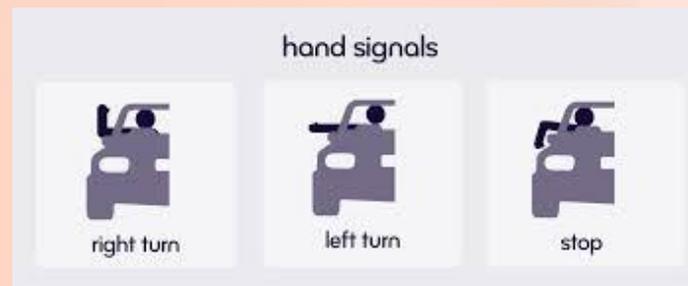
## Not Suited for All Weathers?

As seen with car technology available today, weather can sometimes interfere with their effectiveness. For instance, parking sensors and cameras can't work with snow. So what happens with autonomous cars' laser sensors during harsh weather?



## Predicting and Understanding

Cars would have trouble understanding human signals we can so easily recognize.



# Credits

Pros: Jimmy Cooper

How It would work: Faith Verdier

Levels: Faith Verdier

Pros and Cons: Jimmy Cooper

Robotics Club Number: 15158A and  
15158B