**Tesla Autopilot**

**Introduction**

Tesla claims that autopilot gives you more confidence behind the wheel, increases your safety on the road, and makes highway driving more enjoyable. While truly driverless cars are still a few years away, Tesla autopilot functions a lot like the systems that airplane pilots use when conditions are clear. The driver is still responsible for, and ultimately in control of the car. What’s more, Tesla gives the driver an intuitive access to the information which it is using to control its actions. Along with the usual combination of accident prevention technology such as Advanced Driver Assistance Systems (ADAS), which actuates emergency steering and breaking, the autopilot technology that powers the Tesla Model S and Model X electric vehicles enables cars to autonomously steer, change lanes, follow vehicles, and curves, and park automatically in the garage. The nature of these cars in boldly different from most of the other production vehicles out there in the consumer market. Tesla introduced its Model S software version 7.0 which is a software update for Tesla’s autopilot hardware for Model S and Model X production vehicles, which allows vehicles to use data from the surrounding cameras, radar, and ultrasonic sensors to automatically, steer down the highway, change lanes and adjust speed in response to traffic conditions. Once the driver arrives at the destination, Model S or Model X scans for a parking space and parallel parks on the driver’s command.

**Modules of autopilot**

* Satellite imagery
* Vehicle tracking with ultrasonic sensors
* Radar and camera combination

**Tesla autopilot features**

* Auto park
* Auto steer and auto lane change
* Automatic emergency steering and side collision warning