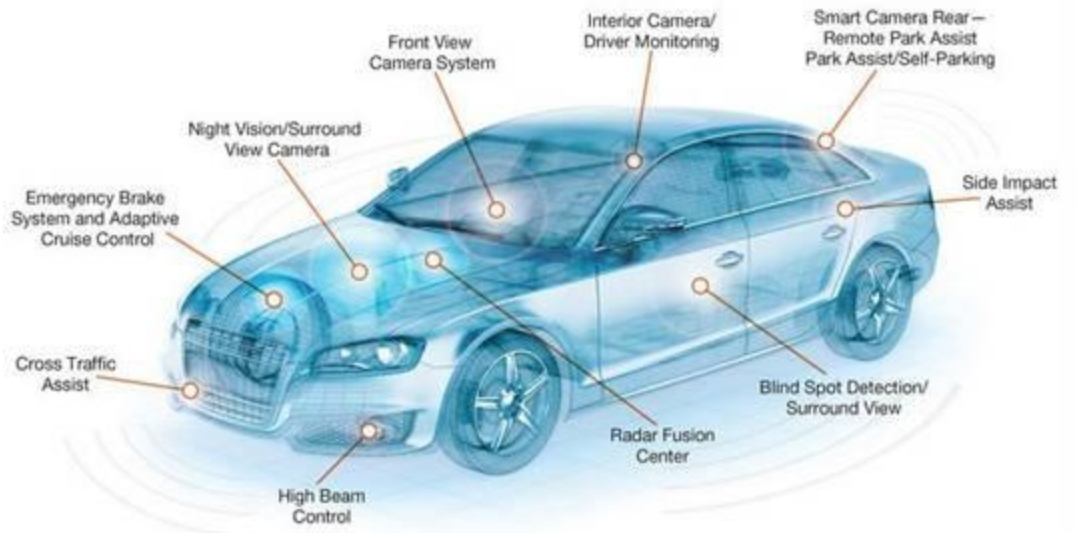


# ASTONISHING FUTURE AUTOMOTIVE TECHNOLOGIES



- The automotive industry is constantly bringing us new technologies, whether it is for entertainment, safety, or for pure innovation.
- Some of the latest car innovations are really exciting technologies that could revolutionize automotive industry and human transportation as well.
- Here are some new technologies that will most likely make it into production.



## CARS THAT COMMUNICATE WITH EACH OTHER

- Now, Cars can communicate with each other and with objects around them using two new technologies namely **Vehicle-to-Vehicle communication (V2V)** and **Vehicle-to-infrastructure communication (V2I)**.
- These technologies could transform the way we drive and increase automotive safety dramatically.
- It is found that, by incorporating V2I and V2V into vehicles, would reduce vehicle crashes by 81 percent.







# VEHICLE-TO-VEHICLE COMMUNICATION (V2V)

- It works by using wireless signals to send information back and forth between cars about their location, speed and direction.
- In this methodology, Cars will get a signal from the other car that is directly in your path and warns you of the potential collision, or even strike the brake automatically to avoid an accident.



Vehicle to Vehicle



# VEHICLE-TO-INFRASTRUCTURE COMMUNICATION (V2I)

- V2I technology allows vehicles to communicate with things like road signs or traffic signals and provide information to the vehicle about safety issues.
- V2I could also request traffic information from a traffic management system and access the best possible routes.



Vehicle to Infrastructure



## SELF-DRIVING CARS

- Cars that drive themselves would most likely have the option to engage in **platooning**, where many cars drive very close to each other and acts as a single one unit.
- Some people believe that platooning would decrease accidents in highways, as the cars would be communicating to each other, without any on-going distractions that drivers face.
- By using lasers, radars and cameras, these self driving cars can analyze and process information about their surroundings faster than a human can.

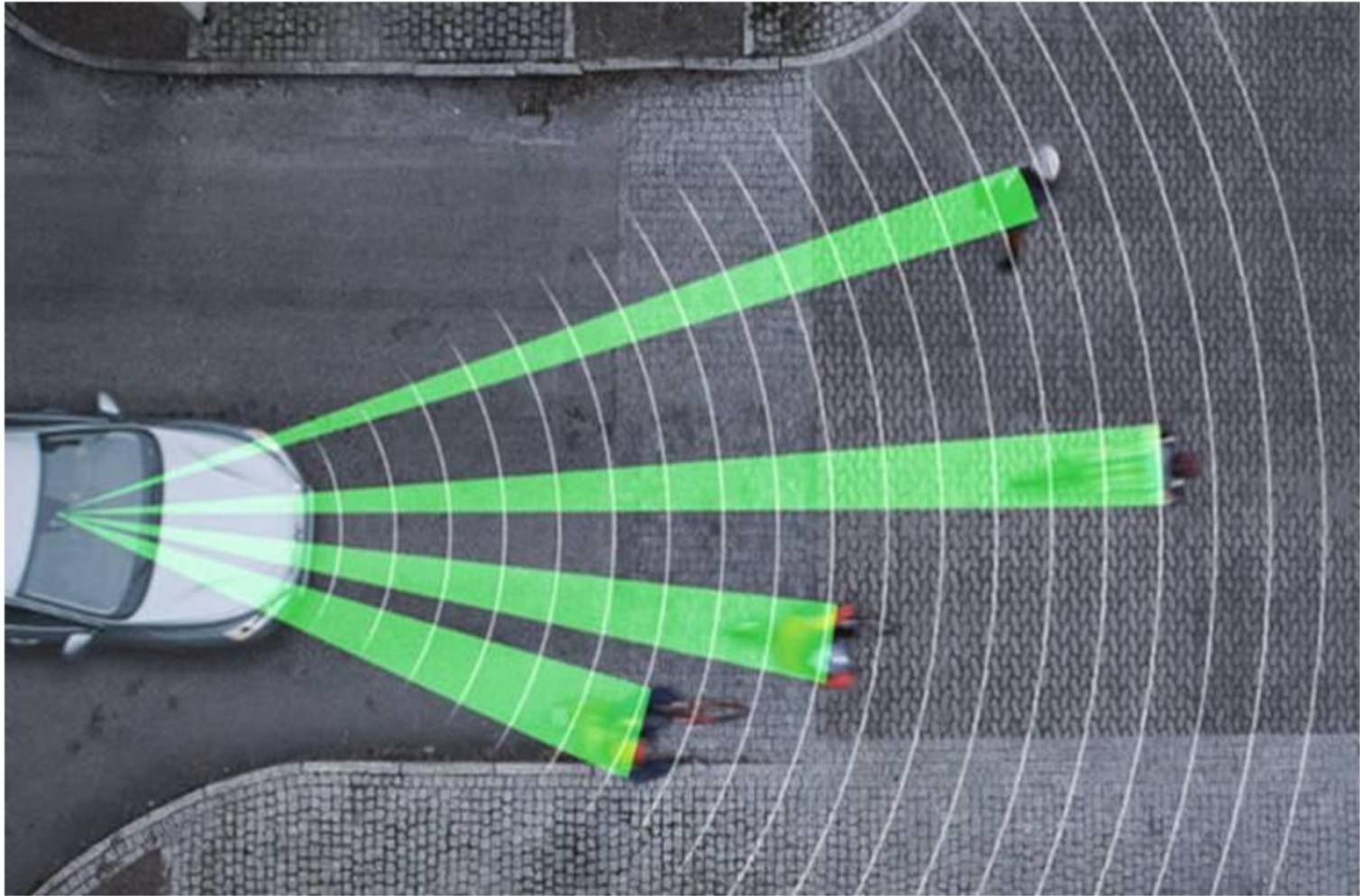


- Self-driving cars could make transportation safer for all of us by eliminating the cause of 95 percent of today's accidents: human error.





# PEDESTRIAN DETECTION SYSTEM



- Car manufacturers has developed a combination of many technologies that goes further than simply identifying objects recently.
- By implementing this technology, cars can identify pedestrians and cyclists, thus allowing avoidance of collisions and injuries in urban areas, where such accidents are most common.
- Since this also happens to be one of the most important type of accidents involving cars, this technology should spread pretty quickly



# LANE DEPARTURE WARNING (LDW)



- This LDW is the most popular technology of this year.
- Most major manufacturers now offer a form or another of lane departure warning systems in their new models.
- These systems alert the driver when he crosses a line without signaling first.
- The system is designed with a goal to minimize accidents by addressing the main causes of collisions: driver error, distractions and drowsiness at the wheel.





# SEMI-AUTONOMOUS DRIVING



- It is an Intelligent Drive system able to take control at low speeds, following heavy traffic even on curvy roads.
- It will also automatically correct the course if it seems like the driver is inadvertently crossing lanes, thus avoiding unfortunate accidents.
- It can also completely stop the car if needed.



# TRAFFIC SIGNS RECOGNITION



- This is already happening in some countries and the system uses front-facing cameras to identify road signs.
- Combining that information with the data contained in today's navigation systems, the car can replicate the speed limit right in the middle of the information cluster.





# THANK YOU

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