**CONNECTED VEHICLES FOR ROAD SAFETY**

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***ABSTRACT:***

According to the National Highway Traffic Safety Administration (NHTSA),  there are over 5 million crashes on roads in an year. Of these crashes, over 30,000 people still die, and many more sustain serious injuries .Connected  vehicles has become a solution to road crashes. Connected vehicle technology will enable vehicles, roads, pedestrians and other infrastructure, and our smartphones to communicate and share vital transportation information. Connected vehicle technology would be the main component of future Intelligent Transportation System.

The communication flows will be based primarily on a networking technology known as dedicated short-range communications (DSRC), which is similar to Wi-Fi. Many vehicles today are already "connected" through cellular technology. DSRC offers unique opportunities for fast, secure, and reliable communications and makes use of GPS, cellular, Bluetooth, and other communications systems, to attain 360-degree awareness of nearby vehicles. This equipment will continually transmit your position , direction and speed to other vehicles with in the vicinity. Drivers would receive notifications and alerts of dangerous situations on the road.

The amount of information that can be delivered between vehicles and other road users is quite high .Field Operational Tests are essential for proving the feasibility of implementing any service or system based on V2V or V2I communications. This Special Issue aims to cover the most recent advances in connected vehicles, V2V communications, and VANET.

Advantages: Safety ,optimised time of travel, efficient fuel consumption.

Challenges: Security , privacy ,reliability, quality of service

Keywords: Connected vehicle technology, DSRC.

**References:**

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