Smart Seatbelt & Accident Notification System

Many deaths occur daily due to car accidents. Deaths due to accidents may occur if the person doesn't wear a Seatbelt, or if the person is drunk. Even if an accident occurs, it may be hard to save the person's life, as he/she might be in an unknown location or they don't have access to any health centres nearby. Many accidents also occur due to potholes on the road.

So for the safety of the driver, I created this device. This device is directly installed in a car. It has a Smart Seatbelt so that the car will only start if the person wears the seatbelt. The seatbelt when worn transmits a signal to the engine. The engine thereby starts. The car will also not start if the person is drunk.

The Seatbelt also has a Pulse/Heartbeat Sensor which monitors the health status of the driver. There is also a Force Sensitive Resistor (Force Sensor) and a Gyroscope to detect accidents. If an accident occurs, the Gyroscope/FSR detects it and then contacts (Call and SMS) the nearest Health Centre (Hospital/Nursing Home) or Ambulance with the help of a GSM Module.

The Exact Location of the Accident is also sent to the Health Centre with a GPS Module. The same process happens if the driver has abnormal body conditions. Potholes are also detected by image recognition of cameras. It will send alerts to the driver regarding the nearby potholes. This device is useful and saves lives.

**Done by**

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