

Enhancing Road Safety Vehicle Black Box with Advanced Accident Detection and Alert System

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Abstract: *Autonomous vehicles want reliable and strong sensor suites and alert systems. This paper discusses the composition and performance of a sophisticated monitoring and alert system for automobile vehicle parameters. The number of automobiles has also grown quickly to meet the enormous population. Additionally, this resulted in an increase in accidents. The accident prevention strategies now in use are all static and dated. Additionally, there is no reliable accident detection system. Automobile vehicle parameters are continuously monitored by a microcontroller which stores the data logs containing vehicle parameter data into a sheltered digital memory card and in the cloud storage. The system doesn't solely record the vehicle parameters data of the automobile periodically, but also actively monitors for any sudden vehicle accident detection. The sensor may facilitate folks to analyze the accident quickly and lawfully when a collision happens to alert the emergency services to that location. The system will update the information whenever an abnormal system event happens. A black box in a vehicle gather driving information about the vehicle before, during and after a crash*

Keywords: Black box, Sensors, accident detection, alert system