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# Super IBelt

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# Abstract

A novel technical device is being researched by the author to bring down the casualties and fatalities of road accidents. This is an experimental project proposed after serious theoretical studies to avert the haphazard road accidents, which take place daily in numbers all over the world. Researches and projects done so far have not given the desired result to slow down the rate of these accidents.

A detailed effort has been taken in their project to overcome the deficiencies in the various project formulated by various previous researchers. Mainly two kinds of algorithm such as ANFIS and logistics regression are applied to predict expected this device can be attached to seat belt of the driver belonging to any kind of four wheelers. It predicts the alcohol intake of the driver and his temperamental conditions such as anger and anxiety. The extra ordinary aspect of the device is to check the biological conditions of the driver such as heart rate, it's variability, finger temperature and etc., which can be detected by non-invasive sensors. This device starts working simultaneously with the start of the engine and the beep sound with visible warning signals are given when faults are detected. The pedestrians, passengers and the police are given immediate warnings as precautionary methods. It is expected by the author that it would be applicable in a good way with very good results to eradicate road accidents.



**Subject Descriptors :** I.2 Artificial intelligence; I.5.1 Fuzzy Set; H.2.8 Data mining; G.3 Regression Analysis.

**Keywords :** Driver, Biological factor, Alcohol, Emotion, Data mining, Machine learning, Fuzzy logic, Rule based, Biological sensors, Accident prediction solutions