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| Techniques | road states and vehicle  events classification and identification and biological and physiological status  A common infrastructure all these systems are shared which is the driving monitoring system.  Smartphone-based sensing in vehicles |
| Methodology | they installed CAN BUS in vehicle for collecting data. They used statistical method: Hidden Markov Model (HMM) and Gaussian Mixture Model (GMM) for detecting.  they used utilized external sensor such as GPS to extract some information and parameters that are not accessible or obtainable through the CAN-BUS.  they used accelerometer, gyroscope and magnetometer of physical device to analyse and detect behavior of the driver by using statistic method.  Dynamic time warping (DTW) algorithm and Bayesian classifier are used to estimate driver event by matching a predefined abnormal event templates with new real time data |
| Accuracy | The results provide good accuracy and simple computational process. |
| Disadvantages | The techniques of non-real time system are very important in training and feedback to the driver but it is not good in alert driver through his driving .In other hand ,real driving monitoring systems need to several hardware devices with long processing time and high memory capacity. However, these systems have its own disadvantages like signal losing, large memory needed, and long-time processing. |
| Future work | proposed develop a comprehensive knowledge about the feature and characteristics of stopping dilemma zone drivers at signalized intersections. |
| link | <https://www.researchgate.net/publication/326069233_Driver_Behavior_Detection_Techniques_A_survey> |