

## Strategies to Analyze In-Vehicle Driver Behavior Data for Improved Automotive Safety

### Description:

Automotive safety and better driving behaviors are areas of growing interest in areas such as commercial fleets, consumer insurance, and student driving training. However, current monitoring systems are limited in what data they collect and/or how the data can be effectively utilized to characterize and improve driver behavior. This technology features methods and systems for objectively assessing driver behavior from vehicle operating data collected from a vehicle data recorder, characterizing the behavior based on customizable thresholds, and can provide feedback for improved performance. The vehicle operating data include instantaneous measurement values for at least one vehicle variable (velocity, acceleration, jerk, engine speed, brake pressure, steering wheel angle, or other suitable variable of the vehicle) for a vehicle driven by driver. The method further includes performing threshold analysis on the vehicle operating data to determine a violation count for the driver and converting the violation count for the driver into a normalized driving rating. The method additionally includes using the normalized driver rating to classify driver behavior in a driver safety classification system.



### Applications:

- Commercial fleets
- Insurance companies
- Student driving training
- Military training

### Benefits:

- Utilizes readily available off-the-shelf components
- Complementary and compatible with existing systems
- Increased automotive safety

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**Protection Status:** Patent application filed  
**Licensing Status:** Available for licensing  
**CURF Ref No:** 09-046