

Motorcyclist Driving Behavior Analysis

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Abstract

Driving Behavior (DB) is a complex concept that describes how the driver operates the vehicle in the context of the driving scene and the surrounding environment. Recently, DB assessment has become an emerging and very important topic. However, given the stochastic nature of driving, measuring, and modeling, DB continues to be a challenging topic today. Thus, this paper argues that in order to move forward in understanding the individual and organizational mechanisms influencing DB, a conceptual framework is outlined in which DB is viewed in terms of the different dimensions established in the Driver-Vehicle-Environment (DVE) system. In addition, DB assessment has been approached by various machine learning (ML) models. However, there has been no attempt to systematically analyze empirical evidence on ML models, moreover, ML-based DB models often face problems and raise questions that need to be resolved. This article presents a systematic literature review (SLR) of the concept of DB investigation.

Keywords

Driving Behavior, Machine Learning, Traffic Accident

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