综述与评论

驾驶行为智能分析的研究与发展

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摘要
越来越多的研究者认识到: 深入地理解驾驶员的驾驶行为将有助于制定更为合理的交通法规和设计更加有效的智能驾驶导航系统, 从而达到减少交通事故提高交通效率的目的. 本文综述了已有的尝试, 较为完整地阐述了目前驾驶行为智能分析研究的四个主要方向: 纵向驾驶行为分析和避撞, 横向驾驶行为分析和道路偏离预警, 复杂驾驶行为学习以及驾驶员状态(疲劳、分心等)分析, 并指出了今后该领域(特别是国内)的可能发展方向.

关键词　驾驶行为分析　驾驶安全　驾驶员状态分析

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Research and Developments of Intelligent Driving Behavior Analysis

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Abstract
It is widely realized that a better understanding of the driving behavior will allow more appropriate road safety policies and more effective intelligent driving guidance systems to be developed, possibly reducing traffic incidents and congestions. By carefully examining the current approaches, this paper provides a brief review of four major issues in this field: longitudinal driving behavior analysis and collision avoidance, lateral driving behavior analysis and lane departure warning, complex driving ability learning and driver status (fatigue, absentmindedness etc.) analysis. The likely future direction of this research field, particularly in China, is also pointed out with a special focus on the advances.

Key words　Driving behavior analysis　driving safety　driver status analysis

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