

Indian Road Traffic Flow Analysis Using Blob Tracking from Video Sequences

Authors : Balaji Ganesh Rajagopal, Subramanian Appavu alias Balamurugan, Ayyalraj Midhun Kumar, Krishnan Nallaperumal

Abstract : Intelligent Transportation System is an Emerging area to solve multiple transportation problems. Several forms of inputs are needed in order to solve ITS problems. Advanced Traveler Information System (ATIS) is a core and important ITS area of this modern era. This involves travel time forecasting, efficient road map analysis and cost based path selection, Detection of the vehicle in the dynamic conditions and Traffic congestion state forecasting. This Article designs and provides an algorithm for traffic data generation which can be used for the above said ATIS application. By inputting the real world traffic situation in the form of video sequences, the algorithm determines the Traffic density in terms of congestion, number of vehicles in a given path which can be fed for various ATIS applications. The Algorithm deduces the key frame from the video sequences and follows the Blob detection, Identification and Tracking using connected components algorithm to determine the correlation between the vehicles moving in the real road scene.

Keywords : traffic transportation, traffic density estimation, blob identification and tracking, relative velocity of vehicles, correlation between vehicles

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