

Real-Time Image Processing Applied To Traffic Queue Detection Algorithm

This paper primarily aims at the new technique of video image processing used to solve problems associated with the real-time road traffic control systems. There is a growing demand for road traffic data of all kinds. Increasing congestion problems and problems associated with existing detectors spawned an interest in such new vehicle detection technologies. But the systems have difficulties with congestion, shadows and lighting transitions.

Problem concerning any practical image processing application to road traffic is the fact that real world images are to be processed in real time. Various algorithms, mainly based on back ground techniques, have been developed for this purposes since back ground based algorithms are very sensitive to ambient lighting conditions, they have not yielded the expected results. So a real-time image tracking approach using edged detection techniques was developed for detecting vehicles under these trouble-posing conditions.

This paper will give a general overview of the image processing technique used in analysis of video images, problems associated with it, methods of vehicle detection and tracking, pre-processing techniques and the paper also presents the real-time image processing technique used to measure traffic queue parameters.