

# Detection and Type Identification of Moving Vehicles

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## ABSTRACT

As a result of industrial and commercial activities, frequent, and the national quality of life in the fast growing, making substantial increase in the number of vehicles, so had to use video surveillance equipment and computer vision systems to manage, the number of vehicles in such a large number of increase traffic monitoring will become really make people aware of the issue. The current use of surveillance cameras in computer-oriented monitoring system that can only be done for the monitoring of the action for a long time, but could not determine a section at a specific time period by type and number of vehicles. Therefore, in order to make intelligent monitoring system to be more accurate detection of vehicles, this study is intended for mobile vehicle models found for related research. In the models to determine the method, so we do vehicle detection, first to detect areas box selected, and then use background subtraction method, the foreground object retrieval, and reduces the potential for detection of range objects, to filter out unwanted background, detect potential vehicle location, and then follow the lane width and built vehicle width ratio, the surrounding area of the background, and take advantage of this two characteristics for each type of vehicle grouping to determine the type of vehicle objects in order to obtain more accurate detection of vehicles.

Keywords : video surveillance、 vehicle detection、 vehicle type identification、 intelligent transportation systems

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