Quantity Calculation of Roadside Motorcycles Based on Detection License Plates

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ABSTRACT

With the rapid development of economic activities, transportation technology is changing rapidly; compared to the past, people have significantly improved the number of vehicles, but are derived from the traffic management is gradually increasing. Past license plate tracking and recognition, need to rely on the main road in the human way to find or search for targets in the video image, not only time consuming but also very laborious; Therefore, this study by computer simulations of the human brain smart way, through successive video images analysis parked at the roadside on the license plate of the automatic positioning and detection, to detect the license plate of the position will be to facilitate the statistical number of motorcycles parked roadside. In this study, as the use of mobile photography, through successive video frames for license plate identification and tracking. First, the color images of gray, and the locking plate as part of the region of interest, and then point through Sobel edge detection and Hough transform method, and then to color characteristics and determine whether the locomotive vehicle license plate recognition, to avoid misjudgment for automotive license plates. License plate tracking part, the first screen for pre-treatment, then locate the position of the plate, grab the bottom plate featured site, search for the next one in the image plate location and characteristics of location, to avoid duplication determination plate, followed by the direction of the track will be tracking range is defined as the basis, and thus the number of favorable locomotive statistics.

Keywords : Video image analysis、license plate location、license plate recognition and tracking

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