

車牌自動辨識系統

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摘要

In this dissertation, we construct the License Plate Recognition system by using PC as a platform and image process techniques. A new character structure hierarchy is proposed and the correlated character characteristic value and character coding are defined. Also, character thinning processing is applied in the system to identify the English characters and digits on the car license plate.

The experiments of this system include two parts. The first part is to locate the license plate in images and divide characters on the plate. By using the following technique, such as Sobel edge detection, noise filters, threshold, and projection, to the captured images; characters and dash on license plate are divided. The second part is character recognition. Characters are recognized by determining the character end-point position, direction of end-point, four corner location, and vertical as well as horizontal characteristic categorization. The experiment results demonstrate that the system attains satisfied performance for recognition speed and correctness rate.

關鍵字：Image Processing , Recognition of license plate, Thresholding