

LICENSE PLATE DETECTION AND EXTRACTION USING IMAGE PROCESSING TECHNIQUES

The main objective of this paper is to provide a novel technique for detecting, extracting and recognition of the license plate from the moving vehicle for automatic billing process in railway station. First the best vehicle image is choosed form the moving vehicle video based on the center position of the license plate.

The next step of this method is the license plate detection. During the license plate detection process first the input image is converted into the gray image. Then apply the Mexican hat filter for removing the illumination effect. Then apply the binarization algorithm for converting the binary image.

In binarization the threshold is taken based on the Otsu thersholding. Then the binarization image is cropped based on the location of the license plate in an image. In this cropped image the connected component technique is applied for identify each letter of the extracted license plate image. To recognize the each letter the Wavelet Transform method is used.

To analyze the performance of this techniques the Recognition Rate (RR) value is used. The Experimental results show that performs well than the other techniques.