Abstract

Carvalho, Jonh Edson Ribeiro de. **An Approach of Segmentation of Plates of Automobiles Based in Mathematical Morphology.** Niterói, 2006. 101p. Dissertação de Mestrado – Instituto de Computação, Universidade Federal Fluminense.

The localization of the plate of automobile license is an instance of the problem of detection of interest regions. Being this stage the main limiter in the recognition of plates, since not the detention of the plate or its characters, it makes impracticable the posterior processing all, if part of the estimated one of that they are detected.

In this dissertation a method based on mathematical morphology for the segmentation of plates of automobiles from complex scenes is presented, or either, scenes where it does not have restrictions in the acquisition of the image. The method consists one-step of attainment of improvements of the images, e of one second specific stage of segmentation of the plate, being based on the characteristic of the region of the plate where it possess one necessarily high contrast enters background of the plate and the characters. The thickness of the characters and in the distance between these, they are the starting point of the method for the localization of the plate.

The method based on morphology presents the advantage to depend little on the illumination conditions, of this form if adjusting the most varied applications. Having as characteristic main, to reduce significantly the number of extracted candidates thus increasing the subsequent speed of the recognition of the plate.

Keywords

Mathematical Morphology, Image Analysis, Patterns Recognition, Computer Vision, License Plate Recognition.