Abstract

Signboards and billboards provide a challenge to image segmentation methods, since these images may also have pictures and graphical objects, apart from text objects. Methods that often succeed in more traditional text block segmentation situations do not perform well here since estimation of text lines and character widths etc fail due to the short sample sizes. Further, extraction of characters of different font sizes, which can be found in the real world and signboard images, remains a problem. In this paper, as a solution to the mentioned problem, we propose two stroke width based binarization approaches. These approaches can be used to eliminate extraneous objects based upon estimates of stroke width. We compare our methods with several other stroke width based binarization methods. We observe that the previous approaches fail, when there are closely spaced thick characters. We show that our second approach is able to extract closely spaced thick characters better than
any of the other methods.

Reference


Index Terms

Computer Science  Pattern Recognition
Key words

Image Segmentation

Thresholding

Stroke Width

Thick Characters

Document Images