

A Robust Text Localization Method for Natural Images

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ABSTRACT

Text localization from natural scene images is a challenging problem because of its complex backgrounds and large variations' text patterns. In this paper, a multilingual text localization method based on connected components from natural digital images with a novel block density metric is proposed to detect and locate texts in natural Images. The method copes non-uniform background and different languages, fonts, colors, sizes, scales, distortion and non-uniform illumination within a tolerable elapsed time. The presented algorithm is experimented on varieties of two standard data sets and two additional data sets of camera and video images with Persian text. The experimental results show that the method proposed 90% recall, 85% precision, 87% f and MDR 13% of text-line level and 70% recall, 74% precision and 71% f of text-word level to achieve state-of-the-art performance.

Keywords: Text Localization, Multi-Variant Languages, Block Density Metric, Camera Image, Video image.