Hybrid Approach to Extract Text in Natural Scene Images

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Abstract

Text Extraction from natural scene images has been done with various methodologies. Most of the existing systems mainly use color and edges for detecting the text. We propose a two stage hybrid text extraction approach by combining texture and CC-based information. Text in the image is detected and localized using first and second order statistical texture features. In the next stage CC extraction is used to segment candidate text components from the localized text region. Finally morphological operations and heuristic filters are used to filter out non text components. Experimental results show that the proposed approach detects, localizes and extracts text from natural scene images efficiently and also can handle variations in size, fonts and orientation.

References

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**Index Terms**

Computer Science  
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**Keywords**

Natural scene images; statistical features; text localization; text extraction; connected component; morphological operation; texture analysis; heuristic filters.