Abstract

Text detection and recognition in natural scene can give valuable information for many applications. However, getting text from images with complex background is challenging task due to less frequency of occurrence text and presence of background outliers resembling text characters. In text detection, algorithms from previous work are applied to localize text region in scene image. First, character descriptor is employed to extract structure features. Second, we tend to designed novel feature representation, stroke configuration map using character boundary and skeleton to build character structure. Our algorithm style is improved to compatible with mobile application. Developed algorithm style is compatible with the appliance of scene text extraction in good mobile devices. The Android-based demo system is developed to highlight the effectiveness of the method of scene text extraction from nearby objects. Also demo system gives the detailed information about algorithm design and performance improvement of text extraction from natural image. The demo system conjointly provides United States some insight into rule design and performance improvement of scene text extraction. The analysis results on benchmark knowledge sets demonstrate that our projected theme of text recognition is comparable the best existing ways. The evaluation results on benchmark datasets demonstrate that proposed framework outperforms in comparison to best existing ways.
References


Index Terms

Computer Science
Pattern Recognition

Keywords

Scene text detection and recognition character descriptor stroke configuration
text understanding

text retrieval
mobile application

text localization