Abstract

Reading text from photographs is a challenging problem that has received a significant amount of attention. Two key components of most systems are (i) text detection from images and (ii) text recognition, and many methods have been introduced to design better feature representations and models for both. Scene text recognition has gained significant attention from the computer vision community in recent years. Recognizing text is a difficult problem, even more so than the detection of scanned documents. To evaluate the performance of recent algorithms in detecting and recognizing text from complex images, in this proposed paper implement two method text detection and text recognition. The features extractors are Harris-Corner, Maximal Stable Extremal Regions (MSER), and dense sampling and Histogram of Oriented Gradients (HOG) descriptors. Then implement text recognition. The first one is training a character recognizer to predict the category of a character in an image patch. The second one is training a binary character classifier for each character class to predict the existence of this category in an image patch. The two schemes are compatible with two promising applications related to scene text, which are text understanding and text retrieval.
Further we extend this concept with word level recognition with lexicon techniques with accurate results. And also recognition text in real time images, videos and mobile application images.

References


Index Terms

Computer Science

Pattern Recognition

Keywords

Character Recognition, Text Detection, Text Recognition