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MULTI-SCRIPT-ORIENTED TEXT DETECTION AND RECOGNITION IN VIDEO/SCENE/BORN-DIGITAL IMAGES

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ABSTRACT

Scene text is one of the most common objects in nature, which frequently appears in many practical scenes and contains important information for many applications such as navigation, scene understanding, autonomous driving, etc. Using advanced neural network technology, we detect those texts from the captured image for easier image processing. In this proposed system we use to detect text by directly predicting word bounding boxes with a neural network that is end-to-end trainable. If the input images are color images means we need to convert grayscale from that color images. The binary conversion is applied to the grayscale image it means that the grayscale image turns into black and white. The filter is applied to remove the noise from the image. The Region of Interest (ROI) is applied to the filtered image. It means that it will crop the word by word automatically and chooses the maximum MSB plane. To the output of the ROI module, a deep neural network is applied. It will check the cropped image with a database image and finally, the accuracy is shown in the output.

Index Terms—ROI,OCR,CNN, CRF

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