
METHODS AND ALGORITHMS FOR DISTRIBUTION OF TEXT FROM IMAGES USING OPENCV2 MODULE

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ABSTRACT: With the help of modern computer technology, the rich library and modules of the Python programming language are used to process images. In particular, using pytesseract and cv2 modules, important algorithms and methods are used to extract text from images.

KEYWORDS: Cv2, tts, model, neural networking, machine learning, pytesseract.

INTRODUCTION

A person constantly feels the need for computers and computer technologies during his activities. With their help, the scope of existing works, the time spent on work and the methods of solving them will be eased.

Python-tesseract is an optical character recognition (OCR) tool for python. That is, it recognizes and "reads" text embedded in images.

THE MAIN FINDINGS AND RESULTS

Python-tesseract is a wrapper for the Google Tesseract-OCR engine. It is also useful as a standalone calling script for tesseract, as it can read all image types supported by the Pillow and Leptonic imaging libraries, including jpeg, png, gif, bmp, tiff, and more. Also, if used as a script, Python-tesseract prints the recognized text instead of writing it to a file.

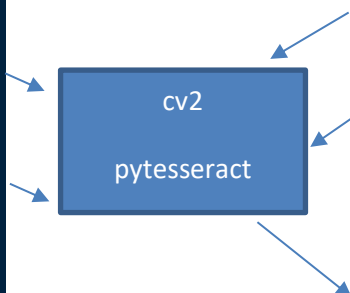
```
# Rasmlardan matnlarni ajratib olish dasturi
import cv2 as cc
import pytesseract as tes

# rasmni o'qish
im = cc.imread('dars1.jpg')

# configurations
config = ('-l eng --oem 1 --psm 3')

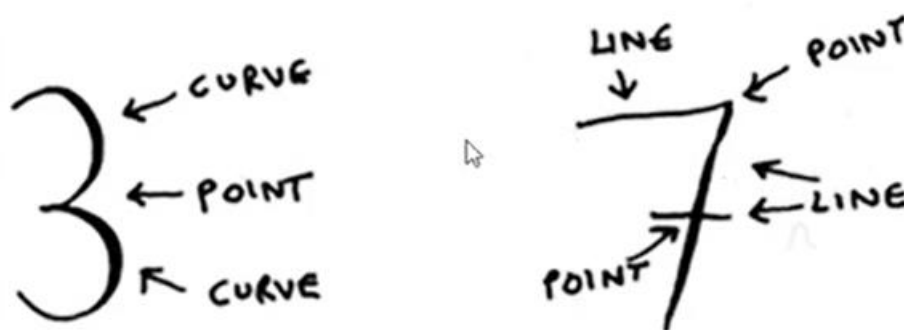
# pytesseract
print("Natija:\n")
text = tes.image_to_string(im, config=config)

# print text
text = text.split('\n')
print(text)
```



Picture1. Basic scheme.

Using the k-nn algorithm included in the Tesseract module, the most optimal evaluation position was used for extracting images.



Picture2. Attributes of the K-NN algorithm.

Here again, K-NN is used and straight and curved lines and intersections in the symbol are taken as parameters.

CONCLUSION

With the help of Open CV, it is possible to provide different textual information with the help of different responses. There are also various integration tools for this, such as RapidAPI. With their help, a large number of texts will be aimed at increasing the capabilities of representatives of various fields.

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