

Technical Report

[Arabic OCR Project]

Project code: [0000]
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Abstract

Arabic OCR is a project to recognize the main important entities inside the visual text. The main problem for this project is that the text is Arabic handwritten text where few people are developing models to recognize that text.



Methodology

Mask-RCNN model has been used inside the detectron2 framework (developed by Meta) We used the Mask-RCNN model to detect the objects accurately by using the masks, And we used the detectron2 framework because it supports a lot of tasks, easy to use, and calculates the main metrics easily.

We depended on the data generator to augment the data either using pixel transformations or spatial transformation

For the dataset, we used three samples besides using the data generator to generate 100 instance per image.

The main objective of the trained model is to detect the id and the date from the image. We evaluated the model on a different image of training images and it predicted the objects successfully.

But **the important note**, the model now isn't able to detect each image in the client's dataset Because what we did before is to prove that the model can do this task at least to detect the id and the date in the image.