

## Arabic Characters Identification Depending on Extracted Features of the Projection-Based Segmentation

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**Abstract:** The need to establish powerful Arabic characters recognition becomes high in these days, especially; many Latin character recognition systems reach to high accuracy whereas Arabic ones still lower. The identification of Arabic characters is particularly difficult because the Arabic text has a property of cursive nature which necessitates segmenting the Arabic text into isolated characters, the matter which represents the major challenge for any Arabic character identification system. The goal of this paper is to increase the accuracy of Arabic identification systems. This paper composes of four phases; the first one is called pre-processing to treat some problems that occurs in scanning, the second one is segmentation process phase. This phase involves the challenge area on that system. So, we try in this paper to deal with this problem. The third phase is features extraction, we try to implement some recognition techniques on the Arabic characters, the last one is identification phase based on the extracted features. In this paper a developed a techniques to detect the skew angle and using different descriptors to recognize the Arabic characters and comparing the accuracy of each one.

**Keywords:** OCR, Feature extraction, Character recognition, Projection.

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