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Off line Arabic handwritten character using neural network (Conference Paper)

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Abstract

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Character Recognition (CR) considered as one of the most important in the field of pattern recognition. The ultimate objectives of the Optical Character Recognition (OCR) system is to simulate the capability of reading, hence the OCR considered as artificial intelligence. In this paper, a character-handwritten recognition for the Arabic language is developed. The main aim of the system is to save time and effort Arabic OCR. In addition, to be the alternative of the typing manual due to provide it fast and reliable. The system has four main stages; preprocessing, segmentation, feature extraction, classification, and recognition. The system is off-line and depends on the image acquisition. So, after acquitted the image has to go through the main stages. The Neural Network used as a classifier. The proposed system is able to recognize as many characters as can with high accuracy rate. In addition, it is focusing on the character that has similarities and the system will also be considered about the number of dots and its position, and the connected components. © 2017 IEEE.

SciVal Topic Prominence ⓘ

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Engineering uncontrolled terms: Arabic languages Arabic recognition Connected component Hand-written characters Handwritten recognition High-accuracy Offline handwriting Optical character recognition (OCR)

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