

New Approaches for the Handwritten Digit Image Features Extraction for Recognition

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Abstract : The present paper proposes a novel approach for handwritten digit recognition system. The present paper extract digit image features based on distance measure and derives an algorithm to classify the digit images. The distance measure can be performing on the thinned image. Thinning is the one of the preprocessing technique in image processing. The present paper mainly concentrated on an extraction of features from digit image for effective recognition of the numeral. To find the effectiveness of the proposed method tested on MNIST database, CENPARMI, CEDAR, and newly collected data. The proposed method is implemented on more than one lakh digit images and it gets good comparative recognition results. The percentage of the recognition is achieved about 97.32%.

Keywords : handwritten digit recognition, distance measure, MNIST database, image features

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