

## **AN EFFICIENT FUZZY METHOD FOR OFFLINE HANDWRITTEN CHARACTER RECOGNITION**

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The offline handwritten character recognition involves the development of a computational method that can generate a description of the handwritten objects in a scanned image. Due to low computational requirements, ease of realization and capabilities of modeling human perception of features, fuzzy logic is probably the most efficient and flexible method available for handwritten character recognition. This work involves the development of an online adaptable fuzzy system for offline handwritten character recognition, which uses an automatic rule base approach.

In this research, it was found that the proposed fuzzy method was an extremely reliable and relatively simple method for the recognition of offline handwritten characters, compared to the other available methods for offline handwritten character recognition such as, artificial neural networks, which require an extensive training data set and long processing time for training. The most important feature of this method is the on-line adaptability, which is unavailable in almost all the approaches developed for off-line handwritten character recognition so far.

The whole method suggested by this paper can be applicable for the recognition of any handwritten or machine written character set in any language. The main requirements would be the different individual character segmentation algorithms associated with different character sets and a proper individual character isolation method.