SKELETONIZATION OF ARABIC CHARACTERS USING CLUSTERING BASED SKELETONIZATION ALGORITHM (CBSA)

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Abstract—Character skeletonization is an essential step in many character recognition techniques. In this paper, skeletonization of Arabic characters is addressed. While other techniques employ thinning algorithms, in this paper clustering of Arabic characters is used. The use of clustering technique (an expensive step) is justified by the properties of the generated skeleton which has the advantages of other thinning techniques and is robust. The presented technique may be used in the modeling and training stages to reduce the processing time of the recognition system.

Arabic characters Skeletons Thinning Fuzzy clustering ISODATA Character recognition