

# **Effect of the Classifier Training Set Size on Accuracy of Pattern Recognition**

**Husam Ahmed Al Hamad**

The paper determines the correlation between training set size and accuracy of neural handwritten recognition. The paper investigates and compares between four variant neural networks, it practices between two different sizes of training sets. The paper illustrates a novel technique contains two major algorithms; first one aims to locate Prospective Segmentation Points (PSP) within the word image, second aims to evaluate each PSP and determining the valid and invalid points. The technique implements four different classifiers and compares their results. To do so, the paper investigates the fusion equations to evaluate confidence values of each PSP, equations obtain a fused value of confidence values from three neural to report whether keep valid segment points (SP) or remove invalid one. The research tracks CPU times and accuracy of the algorithm, as well as, compares the performed experimental results of the classifiers with each other and with related works in the literature.

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