

## **Improved ICHI square feature selection method for Arabic classifiers**

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Feature selection problem is one of the main important problems in the text and data mining domain. This paper presents a comparative study of feature selection methods for Arabic text classification. Five of the feature selection methods were selected: ICHI square, CHI square, Information Gain, Mutual Information and Wrapper. It was tested with five classification algorithms: Bayes Net, Naive Bayes, Random Forest, Decision Tree and Artificial Neural Networks. In addition, Data Collection was used in Arabic consisting of 9055 documents, which were compared by four criteria: Precision, Recall, Fmeasure and Time to build model. The results showed that the improved ICHI feature selection got almost all the best results in comparison with other methods.

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