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## Abstract

In recent years, work on sentiment analysis and automatic text classification in Arabic has seen some progress. However, the problem of emotion classification remains widely under-researched. This work attempts to remedy the situation by considering the problem of classifying documents by their overall sentiment into four affect categories that are present in Arabic poetry- Retha, Ghazal, Fakhr and Heja. This work begins by building an emotional annotated Arabic poetry corpus. The impact of different levels of language preprocessing settings, feature vector dimensions and machine learning algorithms is, then, investigated and evaluated on the emotion classification task.

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### Index Terms

Computer Science

Artificial Intelligence

**Keywords**

Natural language processing classification machine learning sentiment analysis