Abstract

In this paper, we explore text similarity techniques for the task of automatic short answer scoring in Arabic language. We compare a number of string-based and corpus-based similarity measures, evaluate the effect of combining these measures, handle student's answers holistically and partially, provide immediate useful feedback to student and also introduce a new benchmark Arabic data set that contains 50 questions and 600 student answers. Overall, the obtained correlation and error rate results prove that the presented system performs well enough for deployment in a real scoring environment.

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**Index Terms**

Computer Science    Artificial Intelligence

**Keywords**

Short Answer Scoring    Text Similarity    Semantic Similarity    Arabic Corpus