Abstract

The development of methods to deal with the informative contents of the text units in the matching process is a major challenge in automatic summary evaluation systems that use fixed n-gram matching. The limitation causes inaccurate matching between units in a peer and reference summaries. The present study introduces a new Keyphrase based Summary Evaluator (KpEval) for evaluating automatic summaries. The KpEval relies on the keyphrases since they convey the most important concepts of a text. In the evaluation process, the keyphrases are used in their lemma form as the matching text unit. The system was applied to evaluate different summaries of Arabic multi-document data set presented at TAC2011. The results showed that the new evaluation technique correlates well with the known evaluation systems: Rouge-1, Rouge-2, Rouge-SU4, and AutoSummENG–MeMoG. KpEval has the strongest correlation with AutoSummENG–MeMoG, Pearson and spearman correlation coefficient measures are 0.8840, 0.9667 respectively.

References

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Index Terms

Computer Science Pattern Recognition

Keywords

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Summarization

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