

Towards Logical Inference for the Arabic Question-Answering

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Abstract : This article constitutes an opening to think of the modeling and analysis of Arabic texts in the context of a question-answer system. It is a question of exceeding the traditional approaches focused on morphosyntactic approaches. Furthermore, we present a new approach that analyze a text in order to extract correct answers then transform it to logical predicates. In addition, we would like to represent different levels of information within a text to answer a question and choose an answer among several proposed. To do so, we transform both the question and the text into logical forms. Then, we try to recognize all entailment between them. The results of recognizing the entailment are a set of text sentences that can implicate the user's question. Our work is now concentrated on an implementation step in order to develop a system of question-answering in Arabic using techniques to recognize textual implications. In this context, the extraction of text features (keywords, named entities, and relationships that link them) is actually considered the first step in our process of text modeling. The second one is the use of techniques of textual implication that relies on the notion of inference and logic representation to extract candidate answers. The last step is the extraction and selection of the desired answer.

Keywords : NLP, Arabic language, question-answering, recognition text entailment, logic forms

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