

A Model for Generating Explanatory Web-based Natural-Language Dialogue Interactions for Document Filtering*

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A computational linguistics approach for Web-based cooperative dialogues aimed at improving results in achieving a successful filtered bibliographic search on the Web is presented. The model focuses on the user's requests by automatically generating language-driven interactions which take into account the context, user's feedback and the initial search results. The main results of a preliminary working prototype to decrease both the number of conversational turns and the amount of information obtained are described.

Keywords: Information Overloading, Dialog Interactions, Natural Language Processing, Document Filtering.

1. MOTIVATION

The increasing use of Web resources in the last few years has created a need for more efficient and useful search methods. Unfortunately, the current mechanisms to assist the search process and retrieval are quite limited, mainly due to the lack of access to the document's semantics and the underlying difficulties in providing more suitable search patterns.

Although keyword-based information retrieval systems has provided a fair first step for the overall process so far, one of the next challenges will be performing those kinds of task in a more precise and smarter manner in order to make good use of user's knowledge (i.e. intentions, goals, etc) to improve the searching capabilities with a minimum of interactions/exchanges (currently, there is no such interaction, it is up to the users to check whether the huge amount of information delivered is useful or not). Our proposal's main claims relies on the fact that those limitations can be partially overcome by dealing with the following working hypotheses:

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