Abstract

The field of Information Retrieval (IR) has a rich history of developing technology designed to help users find relevant documents.Relevance Feedback (RF) is a technique by which the system is able to reformulate the query by taking relevance information on particular documents or terms from the query [13].

Probabilistic model is one of the common classic model in IR.In IR,belief network model is part of the probabilistic model which can be applied on relevance feedback [8].The used of belief network model is not only can produce relevance documents but also produce documents ordered by descending similarity value.

The result of research show that belief network model can improve information retrieval system where the performance improvement is shown by relevance document retrieved and the position of relevant document in the rangking of searching document's result. By relevance feedback using belief network model can increasing system performance 28,12% for precision, constant for recall and IAP 50,02%.

Keywords : information retrieval, relevance feedback, query, probabilistic, belief network, similarity