Abstract

Information Retrieval is a system that is able to find the relevant documents according to user queries in a document collection. In fact, not all of the retrieved documents by system suits to user needs. Therefore, there is a method that can improve the performance of an information retrieval system, i.e. **Relevance Feedback**. *Relevance feedback allows the user to provide feedback to the system, so the system can know the criteria of relevant documents that user need.*

The relevance feedback method that used is Decision Tree C4.5 algorithm. This algorithm is a classification technique to bulid a tree recursively from the training data. Training data are feedback documents that are returned to the system. From the tree will be known the rules that describe the relevant documents according to the user criteria. Rules are used to classify all documents in the database. Documents that classified as the relevant class will be returned to the user with hope that these documents are more in line with user needs.

From the simulation, we got the result that the relevance feedback can improve the average precision values at specific feedback, but not with the recall and the IAP.

Keyword : information retrieval, relevance feedback, decision tree C4.5, user, feedback