

Abstract

In the Information Retrieval System (IRS), sometimes documents that are retrieved from a user entered query is not relevant. This could be caused either by the user type (human error), or because the user does not know what the query should be entered into the system. Therefore, relevance feedback is implemented in order to get return hits that are relevant and appropriate to the needs of users.

Relevance feedback is a process of re-formulation of initial query based on relevance feedback information from users of the documents early results. By using relevance feedback, the user can select the information relevant to the needs and the user feedback that is used to define a new query. In relevance feedback there are several methods that can be used, one of which is Rocchio algorithm.

Rocchio algorithm works with the query vector closer to the documents that are relevant and keep away from documents that are not relevant. The formation of a new query in a weighted manner rocchio back the old query is added to the terms in accordance with the documents sought.

By using the Rocchio algorithm, the performance of Precision is decrease, Recall increases, and Non Interpolated Average Precision (NIAP) increases. Rocchio Algorithm reaches optimal value when the weight of α is high, β high, and γ low.

Keywords: *Information Retrieval System, Relevance Feedback, Rocchio Algorithm*