

FBR SYSTEM: USER DIRECTED FILTERING OF IMPRECISE QUERIES

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ABSTRACT

The rapid expansion of World Wide Web has made a large number of databases like the bibliographies, scientific databases etc. So user not able to express their need explicitly and it results in to queries that lead to unsatisfactory results. The FBR (Feature Based Retrieval) system allows user to use imprecise queries to express their uncertainty. The traditional way of searching the data requires specifying the queries clearly. More time is needed to retrieve the data with traditional approach. FBR system computes the sensitivity of the output if user modifies certain conditions. The new conditions to improve the quality of result will also be explored by the FBR system. FBR system is designed in such a way that it can handle the probabilistic queries containing uncertainty. To support interactive response time, FBR system allows user to set threshold value. In large databases, to reduce the searching time there is need to search database scientifically which will lead to faster information retrieval. FBR System provides facility to reprocess the query output which is not provided by the existing System. FBR system also explores the suitable interfaces for users to express their uncertainty, and how to turn this input to probability distribution; FBR system provides facility to user to state his uncertainty in terms of probability value. It is possible to reprocess the query output using FBR system.

Keyword: Feature Based Retrieval System, Cluster, Probability Distribution, Sensitivity

1. INTRODUCTION

FBR system is a new way for scientific search in large database. FBR system is designed in way to process the uncertainty and inexplicitly defined queries. FBR system checks the impact of uncertainty over query result. FBR is implemented by using fast algorithms, which provide output to user within real time constraint. So when the user is uncertain about the input data, there is idea that user input should be converted into probability values. This thing motivates the design of FBR System, which will convert the user input into the probability distribution.

To understand the FBR's working, consider the example, suppose there is one large database of Car, which include the information related to various car's with their features. Suppose user want to search the information related any car he has seen. Then the FBR system first analyzes the database of car and then it shows the various features of car to user. Then user gives input to the system. The features of car are like Color, Mac wheel, Type of fuel etc. FBR allows user to express their uncertainty by providing three options i.e. Sure, Not sure, Pretty sure etc. The front end of FBR system converts these user input into the probability values. After processing the user input FBR system generates the report which contains three tables showing the models of car's and attribute score with sensitivity report. FBR's another duty is to help user to check the impact of giving an input about which user is not sure. In