

**Priority Based Search Using Fuzzy Logic and Hadoop**¹Tushar Kapadnis, ²Harshal Patil, ³Abhimanyu Malave, ⁴Prof. R.S. Vairagade^{1,2,3,4} Computer Department, Sinhgad Institute of Technology and Science

Abstract:- Instant search in which a system finds answers to a query instantly using character by character. When the user can search the query then fuzzy search improves to finding relevant answers. In this fuzzy the user can get answers within milliseconds by each query with high throughput. At the same time, the user can get good ranking functions with relevance scores. In this paper, we have to implement existing solution on proximity ranking to instant fuzzy search. According to this project, the user can overcome on the space & time limitations of the solutions.

Keywords: Servlet, JSP, Information Retrieval Search Algorithms, HDFS, Hadoop

1. Introduction

Instant Search: Instant search is an emerging paradigm, which returns the immediate answers with particular users query. For example, Internet song database- in which the user types some song the instant search can get reply immediately. When the user can search the song, they get results instantly according to song by prefer the user experience seeing the results.

Fuzzy Search: Fuzzy search is find the relevant answer by finding records with keywords matching the query exactly.

Finding Relevant Answers within Time Limit: The fuzzy search contains the high-speed requirement. It also achieves instant speed for humans.

Problem Statement:

The problem defines how to integrate proximity information into ranking in instant-fuzzy search to compute relevant answers efficiently? The proximity of matching keywords in answers is an important metric to determine the relevance of the answers. Search Queries typically contain correlated keywords, and answers that have these keywords together are more likely what the user is looking for. For example, if the search query is "Michael Jackson", the user is most likely looking for the records containing information about the singer Michael Jackson, while documents containing "Peter Jackson" and "Michael J Fox" would be less relevant.

2. LITERATURE STUDY

BACKGROUND FOR THE PROJECT:

The concept helps to integrate proximity information into ranking in instant-fuzzy search while achieving efficient time and space complexities. Adaption of existing solutions on proximity ranking to instant-fuzzy search. A native solution is computing all answers then ranking them, but it cannot meet this high-speed requirement on large data sets when there are too many answers, so there are studies of early-termination techniques to efficiently compute relevant answers. To overcome the space and time limitations of these solutions, an approach that focuses on common phrases in the data and queries, assuming records with these phrases are ranked higher. How to index these phrases and develop an incremental-computation algorithm for efficiently segmenting a query into phrases and computing relevant answers is studied. Thorough experimental study on real data sets to show the trade-offs between time, space, and quality of these solutions.

DOMAIN OF STUDY

DATA MINING:

Generally, data mining (sometimes called data or knowledge (discovery) is the process of analyzing data from different perspectives and summarizing it into useful information - information that can be used to increase revenue, cuts costs, or both. Data mining software is one of a number of analytical tools for analyzing data. It allows users to analyze data from many different dimensions or angles, categorize it, and summarize the relationships identified. Technically, data mining is the process of finding correlations or patterns among dozens of fields in large relational databases.

MOTIVATION FOR PROJECT

Companies with primarily use data mining today a strong consumer focus - retail, financial, communication and marketing organizations. It enables these companies to determine relationships among "internal" factors such as price, product positioning, or staff skills, and "external" factors such as economic indicators, competition, and customer

demographics. In addition, it enables them to determine the impact on sales, customer satisfaction, and corporate profits. Finally, it enables them to "drill down" into summary information to view detail transactional data.

With data mining, a retailer could use point-of-sale records of customer purchases to send targeted promotions based on an individual's purchase history. By mining demographic data from comment or warranty cards, the retailer could develop products and promotions to appeal to specific customer segments.

For example, blockbuster entertainment mines its video rental history database to recommend rentals to individual customers. American express can suggest products to its cardholders based on analysis of their monthly expenditures.

Limitation of existing system

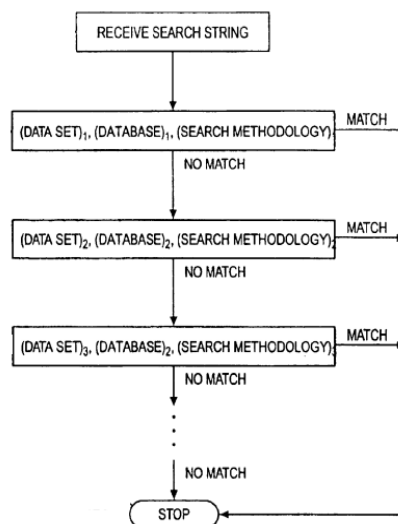
Query: A query q is a string that contains a list of keywords w_1, w_2, \dots, w_i separated by space. In an instant-search system, a query is submitted for each keystroke of a user.

Ranking: Each answer to a query is ranked based on its relevance to the query, which is defined based on various pieces of information such as the frequencies of query keywords in the record, and co-occurrence of some query keywords as a phrase in the record.

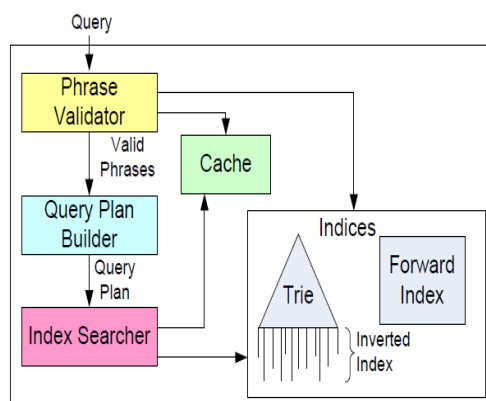
Basic Indexing: As the techniques described in Ji et al. That combines fuzzy and instant search, we use three indexes to answer queries efficiently, a tree, an inverted index, and a forward index.

3. FIGURES

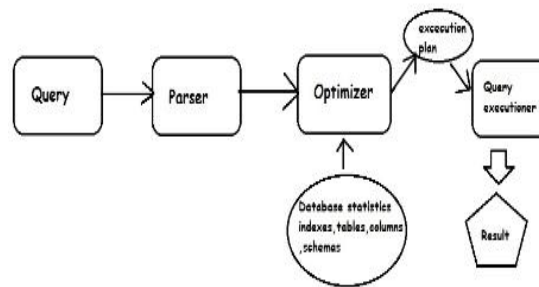
BLOCK DIAGRAM



SERVER ARCHITECTURE OF FUZZY SEARCH



LIFE CYCLE OF A QUERY



Existing System: The instant fuzzy search consist of relative information stored in the particular cloud. However, regarding to particular subject all information can be show on cloud. Example, when the user search the green apple on cloud then apple related all picture show on a cloud. Also apple iPhone, apple pictures an all. Therefore, this is not good output for user. Because the ranking also done on this particular picture. The instant fuzzy search can gives the all result according to the query.

Proposed System: To overcome on the existing system we can devolve the proposed system on instance fuzzy search. We can search the query for particular information on cloud. We not need find the information on cloud, when we search the particular information on cloud then heights ranked information or image can be displayon cloud, and then the user can easily access the information from cloud.

4. Conclusion

In this project, we can re-rank the search query and find the height rank between them. This proposed system is useful to user and it is time consuming, because of ranking. Also in this project we can search the top answers and studiedhow to compute and rank the segmentations consisting of theIndexed phrases.We compared our techniques to the instant fuzzy adaptations of basic approaches. We conducted a very thorough analysis by considering space, time, and relevancy tradeoffs of these approaches. In particular, our experiments onreal data showed the efficiency of the proposed technique for 2-keyword and 3-keyword queries that are common in search applications. We concluded that computing all the answers for the other queries would give the best performance and satisfy the high-efficiency requirement of instant search.

5. FUTURE SCOPE

Instant search by which a system finds answers to a query instantly while a user types in keywords character-by-character. The system provides with ranking to the search in minimum amount of time. The system uses data from its own database having information from a specific domain. Further, the scope of this system can be increased with a broader database, with more information about different domains.

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