

A Context-based Information Refinding System-A Review

M.Riyajoddin¹

¹ CMR Institute of Technology Hyderabad

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Abstract

In recent technological development people are experiencing unprecedentedly data explosion, reading, writing, and collecting different kinds of information from local computer and the global Web. As such most of the times during web search peoples revisit information that have ever been come across occasionally or intentionally. But in most of the cased users do not know enough information, while refinding is a more directed process as users have already seen the information before. A general way to support information refinding is to maintain access logs, recording what users have ever seen based on their revisit frequencies. This survey paper gives the different techniques for context based information refinding systems with intent to give the direction of the my project work with improved context based information refinding system.

Index terms— information refinding, context cue, refinding queries.

1 Introduction

he World Wide has been dramatically increased due to the usage of internet. The web acts as a medium where large amount of information can be obtained at lower cost. Web mining can be defined as the discovery and analysis of useful information from the World Wide Web data. It is one of the data mining techniques to automatically extract the information from web documents. WWW provides a rich set of data for data mining. The web is dynamic and very high dimensionality. A web page contains three forms of data, structured, unstructured and semi structured data. Data sets available in the web can be very large and occupy ten to hundreds of terabytes, need a large farm of servers. The user are collecting different kinds of information from the global web for both read and writing purpose. In the global web, search is an important activity then only considered to an email. Tremendous growth of web, every second millions of information added in the global web. Users are finding and refinding the web information in the global web everyday [9]. People revisit the information that have ever been come across occasionally or intentionally. Refindng web pages is typically better than to initially finding the webpage. Achieving efficient and accurate information retrieval is a challenging task. Refinding is a common task is difficult when previously viewed information is modified, moved or removed. How information refinding is different from information finding? There is a uncertainty in the later process because users do not know get enough information, while information refinding is a more directed process as users have already seen the information before. Information refinding is not the process of finding again [7]. A general way to support information refinding is to maintain access log [10], recording what users have ever seen based on their revisit frequencies. When refinding, users might prefer to have a search the results prioritized by pages that have been seen before. One way to refinding the information using contextual cues [3][2], inspired from the human memory approach. [8].

The people use lot of keywords to search the information. To remember the keyword after a few months ago what we have seen before it is difficult and time consuming task. Because original queries were wrongly remembered most of that time due to their loss of memory. According to cognitive science literature, human memory is predicted on contextual cues to refinding the information.

To get the information for users query exactly even a month or year ago hard to remember that keyword. But the time, place and concurrent activity associated with the happening of that access event may leave a deeper

impression. Contextual information could help as powerful clues to remember the key word. Contextual clues help to users have seen the already viewed information.

Nivethitha (2014) suggested a query analysis for efficient context-based information refinding and page ranking system. Refinding what have done before is a common behavior of human in real life. According to the human natural recall characteristics, users allow to refinding web pages which have seen before. Psychological studies show under which information was accessed can help as a powerful cue for information recall. Here context including time, place and concurrent activity could serve as a useful information recall clue. In this system not only considered finding the refinding queries. But also implement feedback system, so that webpage can be ranked by the multiple user feedback.

Deng et.al. (2013) have worked extensively and suggested an effective method for refinding the information from the web, they could not remember the (2005) had done a detailed analysis and present an extension to traditional bookmarks called landmarks, a user-directed technique that aid users in returning to specific content within a previously visited webpage. The use of traditional bookmarks allows users to return to a previously visited page, it can be hard to re-find facts within that page. Here we investigate the efficiency of landmarks for refinding of information on web-pages. Landmarks allow users to mark information on a webpage that they may want to return to a later date by highlighting the text and adding a landmark in the same fashion as they would a favorite in IE. Landmarks are not meant as a replacement for the bookmarking facility but as an enhancement that help users return directly to previously visited information, giving context to the marked pages.

Hailpern et al. (2011) found that during recall tasks, contextual cues are an important component of human memory. In this paper they present a new interaction technique, pivoting, that allows users to search for contextually related activities and find target piece of information. You Pivot demonstrates how principles of human memory can be applied to enhance the search of digital information. Contextual cues could be one way to improve information recall in our digital lives. You Pivot used the calendar entry's lifespan as the pivot time period. Time Marks allowing a user to access all activity that was ongoing at a particular moment.

Parsons et.al. (2009) extensively worked and suggested a keyword-based information retrieval technique and suggested that the performance can be improved by re-ranking the results based on the context provided by the surrounding terms. A baseline technique was compared against two LSA techniques, and an analysis of the retrieved documents indicated that the re-ranking provided by the LSA techniques significantly improved the efficiency of the retrieved list. However, the participants' performance was not altered by the different techniques. Instead, the findings suggest that, when dealing with a small number of documents, participants will generally access all documents retrieved in a systematic manner. It is therefore hypothesised that the re-ranking technique would be more useful in a significantly larger document collection, where a thorough assessment of all documents is impractical.

This study has also emphasized the importance of assessing the impact of individual differences in any information retrieval system. For example, it was found that LSA did improve performance for participants with lower scores on the comprehension test.

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3 Conclusion

We have studied the comparison of various papers of context based information refinding. The aim of this study was how the results of the information retrieval technique to efficiently refinding the web information could be improved by contextual cues shown in above table.

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Figure 1: G

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Ref	Author	Paper Title	Issues
2	A.P. Nivethitha	Efficient context based information re-finding and page ranking	To build reca based query model to re-f the informat using context
3	Tangjian Liang Zhao, Hao Deng, Wang, Qingwei	Refinder: context-based A information	cues and feed visited by the
	Liu, and Ling Feng	refinding system	powerful (place, concurrent ac for refinding.
4	S. Won, J. Jin, and J. Hong,	Contextual Web History: Using visual and contextual cues to	To Contextual History improves visibility of t history
5	B. MacKay, M. Kellar, and C. Watters	improve Web Browser History An Evaluation of Landmarks for Re-finding Information on the Web	helps people previously vi web pages. To Landmark w an extension traditional bookmarks. Landmark is user-directed technique th

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