

# 1 A Context-based Information Refinding System-A Review

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## 6 **Abstract**

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

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

## 19 **1 Introduction**

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

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

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

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

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

55 Deng et.al. ( ??013) have worked extensively and suggested a effective method for refinding the information  
56 fro m the web, they could not remember the ??005) had done a detailed analysis and present an extension to  
57 traditional bookmarks called landmarks, a user-directed technique that aid users in returning to specific content  
58 within a previously visited webpage. The use of traditional bookmarks allows users to return to a previously  
59 visited page, it can be hard to re-find facts within that page. Here we investigate the efficiency of land marks for  
60 refinding of information on web-pages. Land mark allow users to mark information on a webpage that they may  
61 want to return to a later date by highlighting the text and adding a landmark in the same fashion as they would  
62 a favorite in IE. Land marks are not meant as a replacement for the bookmarking facility but as an enhancement  
63 that help users return directly to previously visited information, giving context to the marked pages.

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

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

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

## 82 **2 Global Journal of Computer**

## 83 **3 Conclusion**

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

## 87 **4 Global**

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Figure 1: G

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Ref	Author	Paper Title	Issues
Number			
2	A.P. Nivethitha	Efficient context based information re-finding and page ranking	To build reca-based query model to re-fine the information 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 a for refinding.
4	S. Won, J. Jin, and J. Hong,	Contextual	To
		Web History: Using visual and contextual cues to history	Contextual History improves visibility of t
5	B. MacKay, M.	improve Web Browser History An Evaluation	helps people previously vi web pages. To
	Kellar, and C. Watters	of Landmarks for Re-finding	Landmark w an extension
		Information on the Web	traditional bookmarks.

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