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A Bird Eye Review On Search Engine Optimiztion For Infromation Retrieval System

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Abstract— In this paper, we have reviewed various research papers to know the depth of research work done in the field of search engine optimization, for easy and simplest way to retrieve the information. Popularity of www increases the new area of interest for research work.

Keywords— Bird Eye Review, Information Retrieval System, Search Engine Optimization

I. INTRODUCTION

Search engine are the most prominent tool to extract information form web (www). The World Wide Web is very large distributed digital information [1]. Since 1990 popularity of internet user's increases gradually, number of software, application tool, and websites has been developed by organization to increase their productivity, economic status to the competing world.

Recent advancement in field of computing technologies makes computing field very comfortable. Every one try to interact with internet services, apart from computing areas, other field requires manual system to learn something about particular technology. But the use of internet doesn't require any other skills to access information through WWW. You need to know how use computer system. If you want to access information www is huge collection of distributed database, it contains record of whole Universe. You just need to know the name or search key of it. Various search engines are designed by the different organization to fulfil the expected requirements of User's. Search Engine are having their own logic's to manipulate the query term entered by the User's it depends on the query as well as the search engine to fetch the correct information. Today's search engine are designed in such way that no matter how does you have written query term, search engine predict the meaning of query as well as it also convert the spelling and grammatical errors automatically. In this paper, we reviewed literatures to find the depth of the research activities carried out in the area of search engine working strategy.

II. LITERATURE REVIEW

Existing work done by eminent researchers which we have reviewed and presented below in tabular form their year of research works.

S.No.	Authors / Organization	Title	Proposed Work	Future Scope /Associated Problem	Publication	Year
1	Venkat N. Gudivada, Vijay VRaghavan, William I Grosky, Rajesh Kasanagottu	Information Retrieval on the World Wide Web	Discussed about the search engine working pattern, Indexing of documents	Indexing quality need to be improved in information retrieval system	IEEE Internet Computing	1997
2	Steve Lawrence and C. LEE Giles	Content and Page Analysis for Improved Web Search	Suggested NEC META Search Engine – Provide consistent user Interface, According to his experiment NEC META		IEEE Internet Computing	1998

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			search engine produce fast result as compared to standard search engine			
3	Maj Bernard, J. Jansen	Improving the Performance of Existing Information Retrieval Systems using a Software Agent	Focused on Integration of Information Retrieval System using software Agent, Focused on feasibility of combining software Agent, Monitoring of User's action during the search process, To develop Users characteristics, To develop software Agent	Modification is required in Search Engine Working Pattern	International ACM Conference on Intelligent User Interface	1999
4	Ricardo Baeza-Yates	Information Retrieval in the Web beyond current search engine	Challenges to explore IR on the web, Relationship of IR with Soft Computing Tool and its benefits, Focused on difficulty posed by fast changes on web site, Difficult to trust on website data, Focused on User Feedback issue	Crawling is bottleneck for web search engine,	International Journal of Approximate Reasoning	2003
5	S G K Murthy, Dr R. N Biswas	A fuzzy Logic Based Search Engine technique for Digital Libraries	Main reason behind using neural network is to support the natural language because user query are most often in form of string, Try to keep the record of matching string of search key, Find out all the possibilities of search key, Care should be taken for the scenario where misplaced query string is same as the other (true) query otherwise ambiguity will be the result		DESIDOC Bulletin of Information Technology	2004
6	Chakkrit Snae	A comparision and Analysis of Name matching Algorithm	Focused on problem associated with name matching algorithm		World Academy of Science, Engineering and Technology	2007
7	ELSEVIER BIGGERBRAINS	Get found. Optimize your research articles for search engine	To optimize your article for better indexing use strong keywords and synonyms,		ELSEVIER	2010

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			Describe document type in file keywords, use meta data to describe your article for indexing and ranking, Use vector graphics for improved ranking, Citation of pass research in current research can optimize your article, Popularize your article by social media tool			
8	Joeran Beel, Bela Gipp Erik Wilde	Academic Search Engine Optimization (ASEO): Optimizing Scholary Literature for Google Scholar and Co.	Ranking algorithm works on occurrence of keyword in title, They discussed the search engine space problem, How citeseer is different from other search engine, Webmaster can alter modify previously published data but ASEO it become difficult to alter information, Search key is most important for ranking of page, Length of the search key is also play vital role, Google scholar indexed the whole document based on search key count by does not necessary that page appears on the top of the indexed page, Google scholar does not index text in figure and tables in raster/ bitmap graphics		Journal of Scholarly Publishing	Jan-2010
9	Meng Cui, Songyan Hu	Search Engine Optimization for Website Promotion	Discuss about component of SE, Information Retrieval System is new and recent area of research , SE is biggest tool to retrieve information, Focused on SE Classification Technique like Directory Search, META Search, Vertical Search ect,	Problem with Flash Technology for Optimization	International Conference on Information Technology, Computer Science Engineering and Management	2011

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			, Focused on SEO Keyword Tool, Link Tool , Usability Tool, Keyword Strategy and High Quality Incoming Tool etc.			
10	Ms. Vandana Dhingra, Dr. Komal Kumar Bhatia	Towards Intelligent Information Retrieval on Web	Information Retrieval is very machine to machine and it becomes difficult to integrate it meaningfully, Search Engine produces hundreds of links it become difficult to manage and identify relevant one , Keyword based searching method is like creating physical connection with page but not understand by the machine so lacking of relationship, Focused to Develop Semantic web, Accurately targeting the required web pages, Need to Develop common framework that can reused and shared across the application, Concept should be linked with other concept rather than creating only hyperlink, Suggested to add Intelligence on the page using META DATA Triples and XML ontologies Tool	Problem associated with search engine – Computer must understand the text meaning before processing , Future Scope for the Developer of Semantic Web	International Journal of Computer Science and Engineering (IJCSE)	April - 2011
11	Dr. S. Saravana Kumar, R. Ranjitha, K. Ramnath, V.G. Gokul	A new Methodology for Search Engine Optimization without getting SandBoxed	Building website for Users rather than for search engine, Maintain link velocity, Focused on safe link building technique, Work on ranked for keyword and pages, SEO is more about strategy, method and structure	Further enhancement might be possible	International Journal of Advanced Research in Computer & Communication Engineering	Sept- 2012
12	Bigger Brain Elsevier	Increasing Trafic website through Search Engine Optimization Technique	Focused about SEo working Pattern, Listing or indexing of your website is based on content and link on your website, Different Search Engine Comparision, Need to have good quality content and right		Bigger Brain Elsevier Career Development Resource for Early Career Development	2012

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			keyword, Not to use broken link, Don't use extraneous content in web page, SEO is logn term process and explain the working of SE, Focused on page ranking algorithm working and crawler based searching pattern			
13	Tim Finin, MJames Mayfield, Anupam Joshi, R.Scott Cost and Clay Fink	Information Retrieval and the Semantics Web	Discuss about semantics web document, Focused on Swangling technology for Semantics web development, Focused on tight integration of search and search interface, Proposed Model and Implemented OWLIR for Retrieval free test document and Semantic markup, Suggested the content of Swangler and Swoogler, Desinged Swangle to support Google to process semantic web document			
14	Fei Wang, Peng Cui, Gordon Sun, Tat Seng Chua, Shiqiang Yang	Guest Editorial: Special Issue on information Retrieval for Social Media	Focused on Time Sensitivity challenges of Social Media Information , Topic Model is an important tool for information retrieval, Related information and item domains is critical for social media retrieval and recommendation	Need to design new information retrieval technologies for social media that can handling the current challenges	Springer: Information Retrieval	2012
15	Robert Busa-Fekete, Balaza, Tamas Elteto and Gyorgy Szarvas	A Robust Ranking Methodology based on Diverse Calibration of AdaBoot	Focused on use of neuro fuzzy based technology can improve the learning capability of ranking function	Serious drawback of ranking function is requirement of additional parameters to rank the page	French National Research Agency	2012
16	Sachin Gupta, Ankit Aggarwal	Study of Search Engine Optimization	Suggested Strategy to optimize website so that website achieve high ranking , Discuss about SEO principles,	Keyword selection is oldest approach	International Journal of Research in Engineering &	Feb-2012

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			Work on keyword selection, Optimized each page by separate search key for every pages			Applied Science	
17	Dr. C.Jayakumar	Enhanced Bonding based Web Page Information Retrieval Using Clustering Algorithm	Creating cluster on the bases of keyword by the authors, occurrence comparison of key term is done to improve system performance, K-Mean clustering algorithm is suggested to find relevant document and compare the occurrence of keyword, and increased the relevance rate	May create problem because many keyword can different synonyms for same word		International Journal of Research in Engineering & Applied Science	Feb-2012

III. CONCLUSION

In this paper, we have presented broad literature review in the area of information retrieval system and search engine optimization technique, Eminent researchers has presented excellent work in this area, and we have observed that still lots of research work is required to represent reliable and efficient information retrieval system, Some of the researchers has presented future scope of work his work. According to our observation deep research work is need in the area of integration of search engine because there is no or minimum researcher has shown their interest, most of the work is carried out in the keyword matching, indexing, page ranking etc.

We observed that following are the major areas for research in information retrieval system

1. Search engines integration

2. Search engine for social media information retrieval

3. Enhancement of page ranking system

4. Effective semantic web for search engines

5. Content based information retrieval accurate information retrieval

6. Search engines integration conflict and challenges in optimization information retrieval system

7. Replacement of keyword based searching techniques

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