

Volume : 5, Issue: 1
January - June 2015

ISSN : 2229 - 3515

International Journal of
**ADVANCES IN
SOFT COMPUTING
TECHNOLOGY**

Editor-in-Chief
Dr. Vaka Murali Mohan

Published by
BHAVANA RESEARCH CENTER

The Impact of Web Page Visibility in Search Engine Result

Vinaya Sri, P¹ and B.V.Balaji²

1. Department of MCA, Sri Vasavi Engineering College, Tadepalligudem, WG, India

2. Assistant Professor, Department of MCA, Sri Vasavi Engineering College,
Tadepalligudem, WG, India

KEYWORDS

Hyperlinks;
Keywords;
Organic Search;
Search Engine
Optimization;
Search Ranking
Algorithms;
Social Media;
Websites;

Abstract: *In this paper we are using Assumptions and Relevance ranking algorithm to increase the website visibility because Search engine optimization is of making minor changes to fractions of your website. When analyzed independently, these improvements might seem like major changes, but when combined with other changes, they will have a obvious impact on your site's user understanding and performance in search results. You're familiar with lot of the topics in this guide, because they're necessary elements for any site, but you may not be making the most out of them. Even though this paper title contains the words "search engine", we'd say that we should base your optimization decisions first and foremost on what's best for the users of your site. They're the main customers of your site and are using search engines to locate your work.*

1. INTRODUCTION

Most specialized communication specialists and researchers can submit to some content on the web that they themselves have authored, such as on their clients' websites, or on sites they uphold for certified, private, or community interests. As a simple research, they might try to find that content using only a common web search engine. If, as is liable, they can create a carefully worded search query by recalling very explicit features of the content, such as its heading, a characteristic key phrase, the name of the website or of the business that owns it, and so forth, they stand a reasonable possibility of accomplishment, with their content emerge on the first page of the search results. On the other hand, if they ask somebody to find the content, someone who does not previously knew it very well—and that, after all, is naturally the condition under which we seek out web content—the probability of

accomplishment likely reduce. The content may well be found, eventually, perhaps after efforting a variety of search queries and scrolling through a lot of pages of search results.

In spite of the essential qualities of specialist communicators', web content and its visibility to potential audiences frequently depends on how good the webpage ranks in a search engine's results, apparently unknowable Intermediary of popularity. As a result, specialist communicators, long familiar to crafting the information architecture, content, blueprint, and usability of websites and pages for their human viewers, should also orient their web work to the unknowable intermediate audience of search engines. To help them do this, this paper aims to answer two general queries: (1) what put in to search engine rankings? And (2) what can web content designer and webmasters do on their pages in general to make their content and sites easier to find by viewers using search engines? To answer these queries, this paper focus only on universal web search engines and distribute lessons that specialists communicators can eagerly put into practice without specialized technical knowledge and without a web advertising resources.

* MS. VINAYA SRI, P

PG Scholar
Department of MCA,
Sri Vasavi Engineering College
Tadepalligudem, WG, India.
E-mail: vinayasripaladugula@gmail.com

The Key Concepts section bring in a hypothetical framework for the tutorial's advance to search engine optimization, explains how the tutorial's journalism was selected, describe search-related terms, and make clear how 3 classes of members outline search engine rankings. In the heart of the tutorial, specialist's communicators will learn three key lessons they can be appropriate to make it easier for viewers to find their web content through search engines:

- (1) Consider the web content's viewers and website's challenger when examine keywords.
- (2) Include keywords into web content that will become visible on search engine results.
- (3) Engage their web content and websites with other web content architects.

Two extra lessons are obtainable in the appendices, exposed in downloadable documents at <http://ieeexplore.ieee.org>: Appendix A: Optimize website content and structure for both human and search engine audiences, and Appendix B: Emphasize keywords in key spots on WebPages.

I I.KEY CONCEPTS

Search engines control among America's and the world's most visited websites [1], [2] and, hence, offer a common crossroads for the or else different interests of web users, search advertising specialist s, researchers, and of course the search engine corporations themselves. These classes of Stakeholders put in different ways to search engine rankings and/or to our research and nearby into how to optimize sites to increase those rankings. Their assistance will turn into clear throughout this division, starting with this tutorial's theoretical framework, which fit in three classes of these stakeholders, and progressing with a explanation of how its literature was particular from a slightly dissimilar set of three classes of these stakeholders. Then, after introducing basic search-related language, this section give details how, from these stakeholders, three classes of participants form search engine rankings.

Theoretical Framework: In principle, the web, hosting an apparently never-ending population of content architects and their web content, would come out to have overcome these kinds of hypercompetitive

circumstances that have limited hopeful content architects competing for an audience in the conventional mass media. In observe , however, prospective audiences of web users can significantly visit only a minute fraction of the web's sites, a situation that has led sociologist Alex Havalais to exemplify the web's ecosystem as an "attention economy" driven by competition for the scarce commodity of users' attention [3, pp.].

In such a financial system, the key logistic role of channeling users' notice is played by search engines, which set the competition's regulations and judge its victors from among the competing websites. Yet, two other classes of stakeholders in a roundabout way contribute to the competition's regulations and results: contending web content creators themselves, and search engine users.

Search rankings allow web content architects to repeatedly observe the exact quantify of their spirited fitness, or lack thereof: for any given search query, precisely one site ranks in the popular top spot, and one other in the less popular second spot, and so on downward the steep incline of rising insignificance. For the huge loads of the web's sites ranking away from the first page of search results, a search engine like Google, according to Havalais, function as "a technology as much of ignoring as it is of presenting". For that reason, some content architects orient their sites not just to directly attracting and preserving the awareness of their prospective human viewers but to accommodating and even taking benefit of search engines and their position rules, to the extent that familiarize a site to search engines has become a expert specialty: search engine optimization (SEO). In response, search engines conceal the competition's regulations and often redefine them in order to stop agonistic content architects and their SEO specialists from gaming the system and thereby undermining search engines' special logistic roles.

Search engine users of course grip the notice economy's key product, their own concentration, and present it not only amongst the sites of competing web content architects but also among search engines themselves, thus convincing search engines to try to better contain users' interests. Since

the end of the search is frequently more motivating than the search itself, it is in users' interests that search engines serve up between their top results only those sites that best meet their apparent needs, which involves that search engines must rank sites with rising correctness on such criteria as their genuineness, and excellence, but especially popularity.

This paper explores in actual detail how each of these three classes of stakeholders throw in to pressure search engine rankings in the Three Classes of Participants influential Search Rankings section. More usually, it is this viewpoint of search rankings as an outcome of the symbiotic association among various stakeholders that guide how this tutorial's literature was chosen and that frames its search optimization lessons.

How Literature was Selected: Since a methodical preparation manual in SEO policies and plans would include several volumes, this short tutorial restricts itself to SEO recommendation that would seem to be the most largely relevant to, and readily related by, specialists communication practitioners. For that reason, it focuses its lessons on the subset of SEO policies and plans that are:

- Appropriate to well-liked, general-purpose search engines, such as Google and Bing, as contrasting to those specializing just in news, shopping or scholarship, and so on;
- Appropriate to a wide range of websites, as divergent to sites require specialized search functionality, such as libraries and e-commerce sites;
- Free, as different to paid search options such as Google AdWords;
- Moral, as opposed to the deceptive tactics used by spammers; and
- Non-technical, applicable by practitioners with expertise in professional communication, not necessarily in website coding.

SEO policies and plans meeting these principles are of attention not only to specialists communication practitioners however also to three classes of stakeholders—overlapping with those bring in in the Theoretical Framework—whose long-

standing contribution with web search result has led them to share their SEO insight. Accordingly, this tutorial draws its SEO training from the journalism distributed by these three classes:

- 1) Published advice from search engine companies;
- 2) Empirical studies from research community;
- 3) Much experience – based collective wisdom and occasional empirical studies from SEO practitioners

Search Engine Companies: The ranking algorithms of search engines corporations like Google are their most precious pieces of thinker property and, hence, suspended from public inspection. However, some search engine corporations bring out SEO suggestion to webmasters, in part in a self-regarding effort to encourage “white hat” (authentic, audience-directed) SEO practices that would ease their efforts to accurately read websites and to depress webmasters and web marketers from resorting to “black hat” (deceptive) SEO plans that seek to game the ranking system. Though such advice characteristically repeat what has long been known by knowledgeable SEO specialists, this paper frequently quotes advice from the top two search supplier in the market—Google and Microsoft (which serves both Bing and Yahoo searches)—since these two would have to be umpire the most reliable sources on their own search engines and because their advice is so basic.

Research Area: Whereas much research has travel around issues related to search values and functionality, research behavior principally for the purpose of revive what Google and other search engine corporations already know has reasonably remained marginal to fields like computer science. Hence, this paper describe as well on explore from fields questioning not so much into what goes into search engines' algorithms but what comes out, in particular the fields of advertising, records and information science, and internet studies. Searches were carried out on the keywords “search engine optimization” and, to a smaller extent, just “search engine(s).” Works originated through such sources were observed for their citations and, using academic databases and especially Google Scholar, for afterward research that,

in turn, cited them, a procedure that led to other works.

SEO Practitioners: Unlike researchers, SEO specialists have a very sturdy motivation to revive what Google and other search engine corporations already be on familiar terms with about their ranking algorithms. From their daily understanding observe the websites' rankings and analyzing their websites' logs, SEO practitioners and webmasters are typically well adjusted to the algorithms' regular transformations. Such understandings are distributed through various online conversation forums, on the websites of SEO corporations, and in popular press books written by the experienced SEO specialists —and turn up profusely in searches for “search engine optimization.” The main idea applied in selecting from such conversation of uneven quality was its trustworthiness. Accordingly, this paper draws, in particular, on books whose achievement has earned them current second or third editions [4]–[6] and, hence, whose extensive experience in the profitable marketplace would have somewhat tested their SEO advice. It also draws broadly on the latest in a series of biennial surveys about SEO practices conducted by the SEO software company and community hub SEOmoz [7]. This latest survey, was carried in March 2011, asked 134 SEO industry specialists to rank more than 100 suspected SEO factors according to their predictable power in Google's ranking algorithm.

Search-Related Terminology This part introduces common search-related language that re-emerge throughout this paper. More particular terms are defined and/or described at points where they are introduced in the key lessons below.

As per the Search Engine Marketers Professional Organization, the main American-based association that stand for specialists in the field, **Search Engine optimization (SEO)** is “the procedure of editing a web site's content and code in order to enhance visibility inside one or more search engines” [8]. The parallel term **search engine marketing (SEM)** consist of SEO plus different paid marketing options that engage search engines, options that are beyond the score of this paper. SEO is characteristically understood not to take in—or at least not to

overly rely on—these paid options in its plan to achieve high rankings among search engines' **organic** (“natural”) **results**, listings of WebPages that a search engine obtain by “applying formulas (**algorithms**) to its search crawler index, combined with editorial decisions and content weighting ” [8]. These ranked listings come into view on **search engine results pages (SERPs)**, frequently surrounded by **sponsored results** (paid advertising), after users enter a search query. For their organic results, SERPs typically evade to listing ten WebPages, featuring for each its title hyperlinked to the webpage, a “**snippet**” of text frequently excerpted from the page, and the page's **URL** (web address).

Search engines gather their search **index** (corpus of web content) in the first place mostly by using a **spider** (a program, also called a bot or a crawler) to frequently **crawl** (surf) the web link by link and record new and restructured pages, invalid links, and so forth. The index comprises the words on the crawled WebPages along with their location and accompanying web coding. While this paper focuses mainly on nontechnical way of SEO, those answerable for websites must to know some **HTML** (hypertext markup language), the most fundamental form of web coding, in which diverse **tags** and their **attributes** are used to predetermine the structure, design, and functionality of a webpage.

Three Classes of Participants Shaping Search Rankings

This section illustrate on the literature to give details how search engine rankings are directly and indirectly shaped by the three classes of interdependent participants introduced in the Theoretical Framework section above:

- 1) Search engine companies and programmers
- 2) Webmasters and SEO practitioners
- 3) Search engine users.

Search Engine Companies and Programmers: Searchers via more than one search engine will possible have noticed that for a given query, the opposing SERPs tend to show dissimilar rankings, and certainly often show diverse sites completely, an surveillance confirmed by researchers [9]–[11]. Every search engine corporation has knowingly or without knowingly programmed its own

partiality. One study observed that in comparison with their challengers, search engines tended to favor sites and services that their own companies owned.

Maybe the most characteristic and unbeaten feature of Google's algorithm is **PageRank**, which (then) Stanford University doctoral applicants Sergey Brin and Lawrence Page established in a 1998 article about what was then their sample search engine [14]. PageRank is a measure of the fame of a webpage as firm by the hyperlinks from other pages leading to it, as well as the fame of those linking pages themselves. It is now just one of more than 200 factors that figure in Google's algorithm [15]. Google's Matt Cutts, a frequent spokesperson on SEO issues, conceptualizes these 200-plus into two general classes [16]:

- (1) Trust—of which PageRank is merely the most well-known part—an appraisal of a site's authority and name.
- (2) Relevance—an evaluation of how well a site topically matches a particular query.

Webmasters and SEO Practitioners: Making difficult the hard work of search engines to serve up what searchers are looking for is the job of webmasters—not all of whom have the inspiration, instance, communication skills, or technical skills to optimally communicate their web content to search engines—and of wily SEO practitioners, who are well provoked to dedicate their time, statement, and technical skills to achieving rankings higher than their site content might otherwise worth. Perhaps revealingly, SERP rankings for commercially leaning queries—the kind of queries for which companies would hire SEO specialists—have been found to be more unpredictable over time than rankings for queries without a straight marketable goal [28].

Search Engine Users: Lastly, web users' search engine first choice and behaviors, in turn, pressure web marketers' SEO strategies and search engines' rankings. For years, Web users have been favoring Google by wide limits over such challengers as Yahoo and, more recently, Bing [31]–[33]. As well, as a result of a 2009 agreement between Yahoo and Microsoft, Yahoo's search

results are now served by Bing's algorithm. Accordingly, SEO industry Professionals, following their users, optimize their sites primarily for Google's algorithm and secondarily for Microsoft's Bing and others, and so this paper frequently focuses on optimizing for Google.

III. SYSTEM DESIGN AND IMPLEMENTATION

The overall system design of Classification is Based

On Assumptions and Relevance Algorithm described in Figure 1 and Figure 1.2.

Below mentioned are some of the assumptions and relevance to user behaviors, these assumptions and relevance will provide the framework of how the algorithm will work.

- 1) Users memory is limited
 - Users are only able to 'remember' up to k number of documents.
 - If a document that have not been used for a period of time, user will refer(view) the document if user wants to use it
- 2) Documents viewed recently will have higher chance to be used.
- 3) Documents used more frequently will have higher chance to be used again.
- 4) Due to the limitation of user memory, documents viewed recently will always have higher chance to be used over more frequently used document.

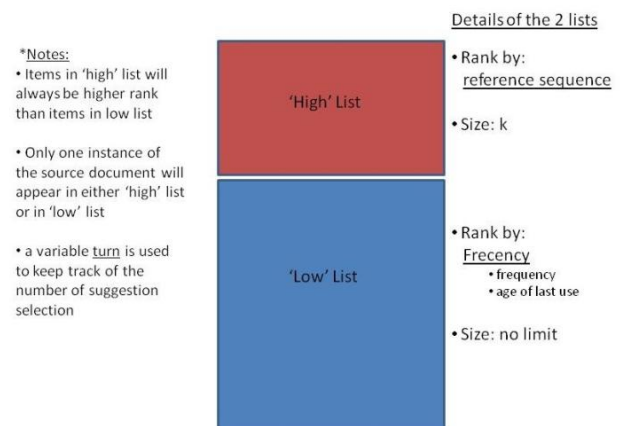


Figure 1

From the assumptions and relevance to user behavior, we can see that it is quite similar to cache and paging. Hence, in our algorithm, we adopted ideas from page and cache replacement algorithms as well as a scoring method adopted from Mozilla Firefox 'Awesome Bar' Suggestion algorithm,

Frequency. The Proposed System is divided into 4 Modules

- A. Query Processing
- B. Semantic role analyzer
- C. Keyword Content Improver
- D. Top ranking
- E. Summarization Block

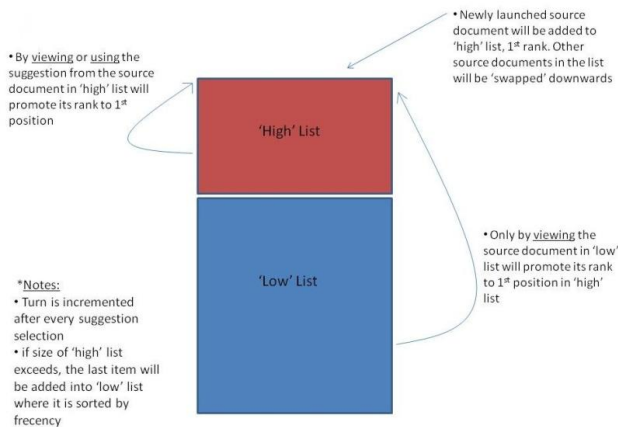


Figure 1.1

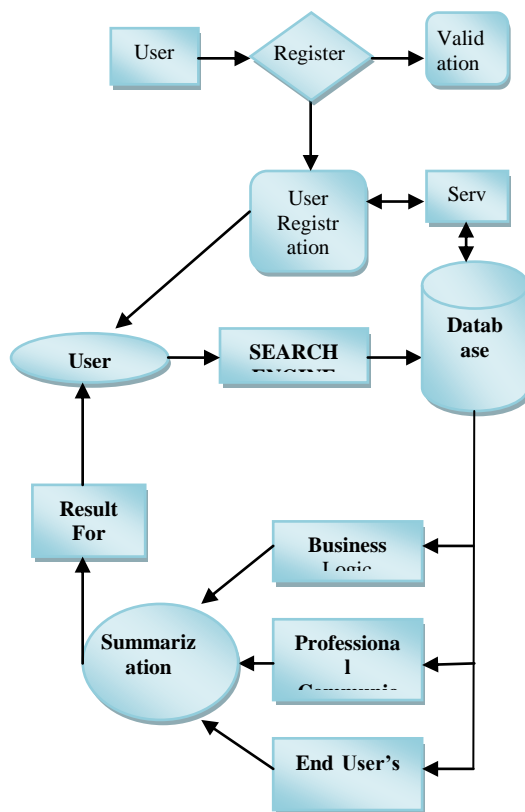


Figure 2. System Architecture

A) Query Processing: In this module query processing is a first module for search engine optimization technique. User give those query in search engine in the string

format, getting result by searching and retrieving from the ad words database and give to the particular result for the user asked query and give our website visibility is high while user searching.

B) Semantic role analyzer: In the semantic role analyzer module getting the query from the user and splitting into semantic role wise. Taking into the database and matching the keyword, and also pre processing is used for splitting the keyword and matching the particular keyword, Giving the result for the particular user for top result

C) Keyword Content Improver: In this module content improver tracking a user query and analyze the particular query and conveying the website developer for the particular query, and tell to improve the keyword in the website visibility then user searching time they get high priority to website, which website contain high keyword. Content improver gives advice to website creator to improve their website to giving high keyword.

D) Top ranking: In this module we give top ranking for the website based on user visits and end user gives feedback for particular user using website. Keyword based giving search, search engine provide high priority for the end user, based on the professional communicator give advice to website creators. and then top ranking for the particular website.

E) Summarization Block: In this module summarization is important to analyze and giving for user searching result. We getting information from the business people, Professional Communicators, and End user's each thing summarization taking from all output, and giving result for user query. User getting the high and quality website for searching the keyword.

IV. IMPLICATIONS FOR PRACTICE

With this paper's 3 general instructions and a variety of sub lessons, as well as the lessons and in the online appendices, web developers have heuristics for how to optimize their web content and website. If applied industriously, these lessons must add positively to their pages' and site's search rankings, at least over the medium to long term it takes for a site to develop proof of trust and ability.

To top sketch and run this medium-to-long-term binder, SEO specialists usually suggest put into practice an SEO strategy in stages following the same universal progression as the 3 lessons accessible in this paper, with the lessons in online appendices A and B applied at approximately the same stage as lesson 2 [4]–[6]. With slight exceptions, winning case studies documented in the journalism also usually follow this pattern. For example, in the winning action-research project mentioned before, Malaga put into practice his set of SEO plans in a series approximately similar to the sequence of this tutorial's lessons, though strangely he reached out to other sites with a pair of easy-to-implement lesson 3-type tactics relatively early in the process, even before his project's site was itself optimized. In a case study of the website of a research institute, Deoghuria, Sinha, and Sinha applied an SEO strategy following a series of steps roughly comparable to this tutorial's sequence of lessons, although they relied heavily on plans discussed in the online appendices and omitted lesson 3-type strategies. Yet, they achieved a high degree of visibility for their site in Google and went on to propose the kind of lesson 3 type of outreach tactics that they had omitted. In a case study of the website of a museum, Espadas, Calero, and Piattini likewise implemented an SEO strategy following a sequence of steps roughly comparable to this tutorial's sequence of lessons, though they emphasized more analysis of the kind introduced in lesson 1. Their strategy led to greater than before site visibility in Google and enlarged site traffic. In spite of such successful cases, this paper's series of lessons must not to be relied upon as a static sketch or a pledge of high rankings. In the time as these case studies were conducted, the bar for successful SEO has continued to rise. As explained in the opening part of this paper, 3 classes of participants put in, directly or indirectly, to search engine rankings. The dynamic communication of search engines' ranking algorithms, SEO practices of one's competition, and web users' searching behaviors guarantees that search algorithms and a site's ensuing rankings will continue to evolve. As search engines' algorithms evolve, the comparative significance and composition of these 3 SEO

lessons and other SEO plans will unavoidably shift. For instance, the pressure of on-page has been declining over time, whereas the power of inbound links (lesson 3) has been rising, and the quick increase of social media has been lashing new ranking and optimization methods that did not exist at all a few years ago. In specific, SEO algorithms have been developing in a way that grants more influence to offsite factors away from web developers' direct control and into the hands of websites' viewers. Such a trend will progressively more challenge web creators to dedicate more time and assets to refining for their sites.

V. CONCLUSION

In this paper we proposed to use Assumptions and Relevance as a helpful sector of user search behaviors. Users frequently carry out numerous tasks during their search methods. Statistical outcome on 0:5 billion sessions from web search logs showed that: (1) on 30% of sessions include multiple tasks, and (2) about 5% of sessions contain interleaved tasks. To evaluate the overall efficiency of Assumptions and Relevance Algorithm, we compared session and query tracks in determining user satisfaction, forecasting user search interests, and telling related keywords. First, evaluating to session and query tasks, Assumptions and Relevance Algorithm is more exact to determine user satisfaction. Second, users are more likely to discover useful information following the Assumptions and Relevance Algorithm. Third, we found that calculating ranking functions at Assumptions and Relevance level is comparable to query level and more sensitive than session level. Forth, since queries represent atomic user information needs, they can well protect topic resemblance between query pairs. Last but not least, we found that Assumptions and Relevance-based query suggestion can provide balancing results to other models. These results verify the need to pull out queries from web search logs and suggest possible applications of using Assumptions and Relevance Algorithm in search and recommendation systems.

VI. REFERENCES

- [1] Hitwise. (2012, Mar. 17). Top 10 websites. [Online]. Available: <http://www.hitwise.com/u/datacenter/main/dashboard10133>.

- [2] J. Rognerud, Ultimate Guide to Search Engine Optimization: Drive Traffic, Boost Conversion Rates, and Make Lots of Money, 2nd ed. Irvine, CA: Entrepreneur Press, 2011.
- [3] J. Bar-Ilan, "Comparing rankings of search results on the web," *Inf. Process. Manage.*, vol. 41, no. 6, pp. 1511–1519, 2005.
- [4] A. Mowshowitz and A. Kawaguchi, "Measuring search engine bias," *Inf. Process. Manage.*, vol. 41, no. 5, pp. 1193–1205, 2005.
- [5] D. Lewandowski. (2011). The influence of commercial intent of search results on their perceived relevance Proceedings.
- [6] S. Brin and L. Page. (1998). The anatomy of a large-scale hypertextual Web search engine, *Comput. Netw. ISDN Syst.* vol. 30, pp. 107–117
- [7] Google. (2011, Dec. 9). Google Basics. Webmaster Tools Help.
- [8] L. Introna., H. Nissenbaum, "Shaping the web: Why the politics of search engines matters," *Inf. Soc.*, vol.16, no. 3, pp. 169–185, 2000.
- [9] S. Silverwood-Cope. (2012, Feb. 8). Wikipedia: Page One of Google UK for 99% of searches. Intelligent positioning blog.
- [10] D. Goodwin. (2012, Mar. 19). Bing, not Google, favors Wikipedia more often in search results.
- [11] M. P. Evans, "Analysing Google rankings through search engine optimization data," *Internet Res.*, vol. 17, pp. 21–37, 2007.
- [12] SEOmoz. (2012). Google algorithm change history. [Online]. Available: <http://www.seomoz.org/googlealgorithm-change>
- [13] Google. (2011, Dec. 9). Google Basics. Webmaster Tools Help. [Online]. Available: <http://support.google.com/webmasters/bin/answer.py?hl=en&answer=70897>
- [14] A. Bifet, C. Castillo, P.-A. Chirita, and I. Weber, An analysis of factors used in search engine ranking," presented at the Workshop on Adversarial IR on the Web. [Online]. Available:<http://airweb.cse.lehigh.edu/2005/bifet.pdf>
- [15] R. A. Malaga, "Worst practices in search engine optimization," *Commun. ACM*, vol. 51, no. 12, pp. 147–150, 2008.
- [16] Hitwise. (2012, Mar. 17). Search engines. [Online]. Available: <http://www.hitwise.com/us/datacenter/main/dashboard-23984.html>
- [17] B. J. Jansen and A. Spink, "How are we searching the world wide web? A comparison of nine search engine transaction logs," *Inf. Process. Manage.*, vol. 42, no. 1, pp. 248–263, 2006.
- [18] A. Whitten. (2012, Mar. 1). Google's new privacy policy. Google official blog. [Online]. Available:<http://googleblog.blogspot.com/2012/02/googles-new-privacy-policy.html>
- [19] K. Szymanski. (2010, Jun. 21). Quality links to your site. Google webmaster blog. [Online]. Available: <http://googlewebmastercentral.blogspot.com/2010/06/quality-links-to-your-site.html>
- [20] R. Baeza-Yates, C. Castillo, and F. Saint-Jean, "Web dynamics, structure, and page quality," in *Web Dynamics: Adapting to Change in Content, Size, Topology and Use*, M. Levene and A. Poullovassilis, Eds. Berlin, Germany: Springer-Verlag, 2004, pp. 93–109.



P.Vinayasri received B.Sc Degree in MPC from Andhra University, visaksahptam, India. She is pursuing Master of Computer Applications in Sri Vasavi Engineering College, Tadepalligudem, Affiliated to JNTUK Mail: vinavasripaladugula@gmail.com



Mr. B. V. Balaji has completed his M.Tech (computer science and engineering) from JNTUK UNIVERSITY KAKINADA. Currently, he is working as Assistant professor in Sri Vasavi Engineering College, Tadenalligudem. Andhranradesh.