# Speeding up your Web Search

You don't need to brush up on Boolean principles to refine your Web search. Just follow these tips or try one of several information search solutions.

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Search engines are the express lanes of the Internet. Knowing how to navigate them can help you get exactly the information you need in seconds flat.

This article will address the differences between search engines, offer basic and advanced search methods, and discuss Web search technologies and alternatives.

#### HOW SEARCH ENGINES WORK

Search engines employ different methods of finding Web pages and ranking them according to relevance of information requested.<sup>1</sup>

Search engines such as <u>Google</u> and <u>Altavista</u> gather information by "crawling" or "spidering" through the Web. They check all the pages in a site and then proceed through pages linked to that site. As it progresses, it creates an indexed database of the content of each page it finds. Some search engines index more Web pages than others, while others update their indexes more often.

Many search engines pick up on how often and where the key word appears on a Web page.<sup>2</sup> Pages on which key words appear more frequently or near the top usually will be deemed more relevant.

Search engines garner additional listings by charging advertisers to list their Web sites (e.g., a pharmaceutical company's site promoting a particular drug) among the search results. These listings vary from paid placement, where sites are guaranteed a high ranking, to paid inclusion, by which an advertisement might be listed in more search requests.<sup>3</sup>

Taken together, these methods can generate millions of search results for a user who enters a broad topic. For example, entering "depression" in the Google search field produces 5,420,000 links ranging from product sites, government agencies and academic departments, to advocacy organizations and patients' blogs. Unless the page relevant to you happens to be among the top five search results, you will need to refine your search. Fortunately, there are many ways to do this.

### REFINING YOUR SEARCH: BASIC TIPS

Say you're trying to find this article without a link or a URL. Just follow these simple key word tips.4

- First, try the obvious. Enter Psyber Psychiatry .
- Use words likely to appear on a site with the information you want (e.g., psychiatry, John Luo).
- Make key words as specific as possible-for example, Current Psychiatry Psyber vs. Psyber Psychiatry

Google and most search engines assume that you want to find pages with all the words you have entered. Other search engines, such as <u>Teoma</u>, usually generate pages containing all key words preceded by a + (e.g., + **Current + Psychiatry** will

produce a link to this Web site).

If that search produces too many results, you can eliminate sites containing certain key words by inserting a - before the key word (e.g., + current + psychiatry -American -psychology). Your search still may be too broad, however, because the words "current" and "psychiatry" could appear anywhere on the site-including pages you're trying to rule out. Placing key words within quotation marks (e.g., "Current Psychiatry" "Psyber Psychiatry") can eliminate still more sites.

### **ADVANCED SEARCHES**

If your search requires even more fine-tuning, consider the following:

**Site search.** Specifying a site in your query can uncover references to specific topics. For example, enter **computers site:** <a href="https://www.currentpsychiatry.com">www.currentpsychiatry.com</a> in Google to find all pages with computers mentioned on the CURRENT PSYCHIATRY Web site. Other sites such as AltaVista use the term **host:** instead of **site:**.

**Title search.** Every Web page has an HTML title, which is also searched by the spider programs. Because an HTML title usually is indicative of the site's content, searching through these titles may point to relevant information. Use **allintitle:** or **intitle:** to find a site (e.g., **intitle:currentpsychiatry**).

**URL search.** Similar to a site and title search, you can also search for words in the URL of a Web page. For example, in Google try entering **current inurl:psychiatry** or **inurl:currentpsychiatry**.

Some search engines employ techniques such as "clustering" (prevents a search from finding too many results from the same site), "stemming" (searches for variations of a word), and "find similar" (seeks out other pages with similar information). Some sites offer "related searches" or "search again" options to help users zero in on the desired information.

Confused about which commands and search features work for which search engines? <u>searchenginewatch.com</u> offers a comprehensive list of basic and power search commands, search assistance features, customization and display features, and Boolean commands.

Because Google is the most popular search engine, many search tools have been developed based on the Google engine. Fagan Finder provides a Web-based interface to Google that lets users search by exact phrase, any/all words, subject, author, and many other ways. Visualization technologies such as Touchgraph and Anacubis, both of which are connected to Google, allow searchers to visually explore and navigate relationships between Web sites.

<u>KartOO</u> is a metasearch engine with visual display interfaces. A metasearch engine uses other search engines to find information. After you enter a search term, KartOO launches the query to a set of search engines, compiles the results, and presents them in a series of interactive maps through a proprietary algorithm. Users can narrow the search by clicking on one of the plus/minus icons and categories between the results.

# WHEN ALL ELSE FAILS ...

If you cannot be bothered with search engine tricks and tools, consider Ask Jeeves, a popular site that uses natural language processing to enter a search request. Users simply phrase and enter a query as it would be phrased in conversation-for example, "What are the side effects of lithium?" Using techniques such as tokenization, stemming, parsing, and semantic analysis, Ask Jeeves attempts to determine the information you desire, and then generates results via the Teoma search engine.

If you're really strapped for time, you could pay someone to do the searching for you.<sup>5</sup> For example, <u>Google Answers</u> allows users to submit a question for between \$2.50 and \$200. Google's research team will provide an answer, usually within 24 hours.

If you have any questions about these products or comments about Psyber Psychiatry, click here to contact Dr. Luo or send an e-mail to <a href="mailto:Current.Psychiatry@dowdenhealth.com">Current.Psychiatry@dowdenhealth.com</a>.

## **Related Resources**

Sullivan D. Articles on searchenginewatch.com:

- Search engine math. http://www.searchenginewatch.com/facts/math.html
- Power searching for anyone. <a href="http://www.searchenginewatch.com/facts/powersearch.html">http://www.searchenginewatch.com/facts/powersearch.html</a>
- Search assistance features. http://www.searchenginewatch.com/facts/assistance.html

### Disclosure:

Dr. Luo reports no financial relationship with any company whose products are mentioned in this article. The opinions expressed by Dr. Luo in this column are his own and do not necessarily reflect those of CURRENT PSYCHIATRY.

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