## Google and Beyond: Research-Quality Web Searching

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#### **COURSE PAGES:**

http://www.lib.berkeley.edu/find/types/websites.html http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html



#### Goals

- Search Google effectively and precisely
- Know when to use other search engines and web directories
- Evaluate what you find on the web

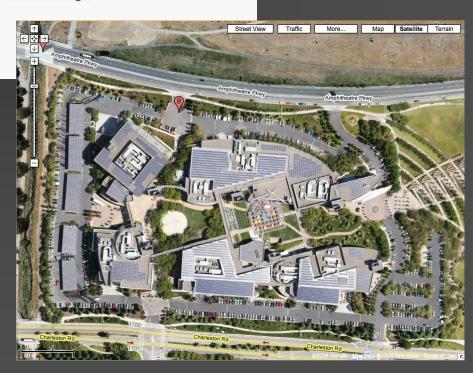


Google Search | I'm Feeling Lucky

Advanced Search Preferences Language Tools

Advertising Programs - Business Solutions - About Google

@2008 Google



## How Google works

- BEFORE you search:
   "Crawls" pages on the public web
   Copies text & images, builds database
- WHEN you search:
   Automatically ranks pages in your results
  - Word occurrence and location on page
  - Popularity a link to a page is a vote for it
  - ~ 200 factors in all!

## Searching Google

- Think "full text" = be specific war of 1812 economic causes vs. history
- Use academic & professional terms domestic architecture vs. houses

```
genome society
gets International Mammalian Genome Society
```

also try combinations with association, research center, institute, directory, database

## Searching Google

Specify exact phrases

```
"tom bates"
"what you're looking for is already inside you"
```

 Exclude or require a word proliferation -nuclear bush legacy +environment

## Limit your search to ...

Web page title intitle:hybrid allintitle:hybrid mileage

Website or domain site:whitehouse.gov "global warming" site:edu "global warming"

## Limit your search to ...

File type filetype:ppt site:edu "global warming"

Definitions

define:pixel

define: "due diligence"

## On the results page

- Search box (use to modify)
- "Cache"
- "Related pages"
- "Translate this page"

## Google's other databases



## Why go beyond Google?

- Search more of the web Yahoo! search.yahoo.com
- Get more options
  Exalead www.exalead.com/search

## Why go beyond Google?

Take advantage of human selectivity

Librarians' Internet Index www.lii.org

InfoMine infomine.ucr.edu

Google Custom Search Engines (CSE)

**How to find these:** 

www.lib.berkeley.edu/find/types/websites.html

Scroll down to "New Approaches to Web Searching"

#### CRITICAL EVALUATION

Why Evaluate What You Find on the Web?

- Anyone can put up a web page
- Many pages not updated
- No quality control
  - most sites not "peer-reviewed"
    - less trustworthy than scholarly publications

#### Before you click to view the page...

- Look at the URL personal page or site ?
  - ~ or % or users or members
- Domain name appropriate for the content ?
  - Restricted: edu, gov, mil, a few country codes (ca)
  - Unrestricted: com, org, net, most country codes (us, uk)
- Published by an entity that makes sense?
  - News from its source?

www.nytimes.com

Advice from valid agency?

www.nih.gov/ www.nimh.nih.gov/

## Scan the perimeter of the page

- Can you tell who wrote it?
  - name of page author
  - organization, institution, agency you recognize
- Credentials for the subject matter?
  - Look for links to:

"About us" "Philosophy" "Background" "Biography"

- Is it current enough?
  - Look for "last updated" date

#### Examine the content

- Text
  - possibly forged ?
  - why not a link to published version?
- Sources
  - documented with links or notes?
  - do the links work?
- Evidence of bias
  - in text or sources ?

#### Do some detective work

- Search the URL in <u>alexa.com</u>
  - Click on "Site info for ... "
  - Who owns the domain?
  - Who links to the site?
  - What did the site look like in the past?(Wayback Machine)

#### Do some detective work

- Which blogs link to it? What do they say?
  - Try the URL in Google Blog Search

See what links are in Google's "Similar pages"

Look up the page author in Google

### Does it all add up?

- Was the page put on the web to
  - inform?
  - persuade ?
  - sell?
  - as a parody or satire ?
- Is it appropriate for your purpose?

## Try evaluating some sites...

- Search a controversial topic in Google such as
  - nuclear armageddon
  - prions danger
  - "stem cells" abortion
- 2. Scan the first two pages of results
- 3. Visit one or two sites
  - Use the checklist (next two slides) to evaluate their quality and reliability

#### Web Page Evaluation Checklist



to
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Title and URL of page you are evaluating:	
Personal page or site?	□ ~ or %, or users, members, or people
What type of domain is it?	□.com □.org/net □.edu □.gov/mil/us
Appropriate for the content?	□ non-US □ other:
Published by entity that makes sense?	Publisher or Domain Name entity:
Does it match the name of the site?	
Who wrote the page?	□ E-mail □ Name:
Credentials on this subject?	Evidence?
(Truncate back the URL if there are no useful links.)	
Dated?	Date
	Current enough for your purpose?

#### Web Page Evaluation Checklist



Sources documented with links or notes?	
Can you verify that quoted text was not altered or forged?	
Links to more resources?	
Do they work?	
Evidence of bias?	
Search URL in alexa.com, click on	Who owns the domain?
"Site info for"	Who links to the site?
Is the page rated well in a directory?	
www.lii.org or infomine.ucr.edu or about.com	
Which blogs link to it? What do they say? blogsearch.google.com	
Look up the author in Google	
Why was the page put on the Web?	□ Inform □ Persuade □ Sell
	□ Satire or parody?
	Other:



# Bottom Line: Is the web page appropriate for your purpose?