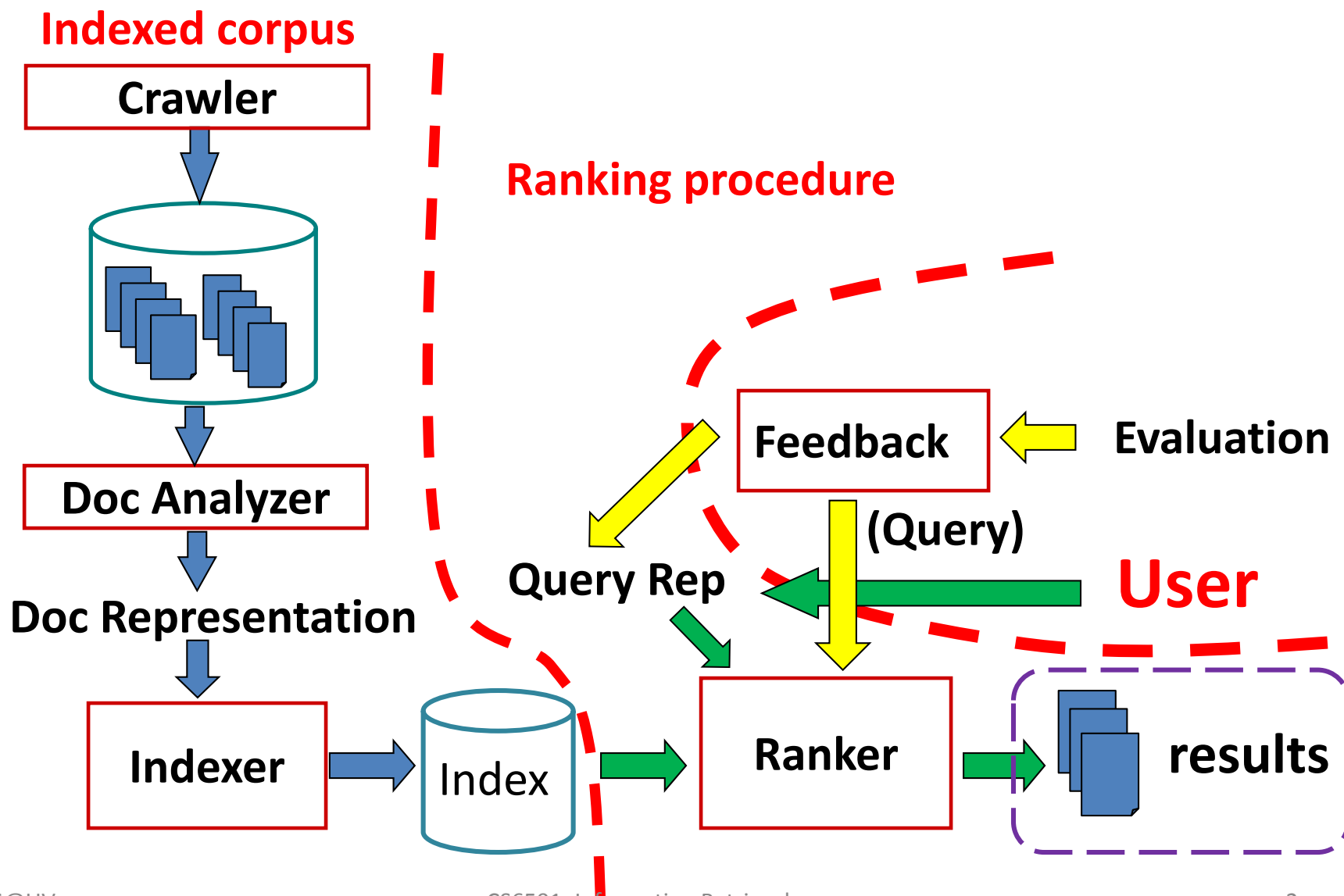


# Search Result Interface

Hongning Wang

CS@UVa




# Abstraction of search engine architecture



# Search interface

- Evolution of Google's result interface
  - <http://www.seosmarty.com/google-interface-evolution/>


# Google's

 obama  

[Web](#) [News](#) [Images](#) [Videos](#) [Books](#) [More ▾](#) [Search tools](#)

About 151,000,000 results (0.46 seconds)

### News for obama



**Ted Cruz: Barack Obama using FAA in economic boycott of ...**  
[Politico](#) - 2 hours ago  
The State Department and Sen. Ted Cruz sparred Wednesday over the Texas Republican's accusation that the **Obama** administration was ...

**LA-bound Obama sticking to fundraising, event schedule ...**  
[Los Angeles Times](#) - 2 hours ago

**Why Obama Wants Israel to 'Do More' About Civilian Deaths**  
[TIME](#) - by Michael Crowley - 15 minutes ago

[More news for obama](#)





### Barack Obama

[www.barackobama.com/](http://www.barackobama.com/) ▾ Barack Obama ▾  
Sign the petition to say it's time to give America a raise. Sign the petition. "You and I, as citizens, have the power to set this country's course." —President **Obama**.

**Barack Obama** - Wikipedia, the free encyclopedia  
[en.wikipedia.org/wiki/Barack\\_Obama](http://en.wikipedia.org/wiki/Barack_Obama) ▾ Wikipedia ▾  
Barack Hussein **Obama** II is the 44th and current President of the United States, and the first African American to hold the office. Born in Honolulu, Hawaii, ...  
[Michelle Obama](#) - Barack Obama, Sr. - Early life and career of Barack - Ann Dunham

**President Barack Obama | The White House**  
[www.whitehouse.gov](http://www.whitehouse.gov) ▾ The Administration ▾ White House ▾  
With a father from Kenya and a mother from Kansas, President **Obama** was born in Hawaii on August 4, 1961. He was raised with help from his grandfather, who ...

**Barack Obama (BarackObama) on Twitter**  
<https://twitter.com/BarackObama> ▾  
The latest from Barack **Obama** (@BarackObama). This account is run by Organizing for Action staff. Tweets from the President are signed -bo. Washington, DC.



[More images](#)

## Barack Obama

[Follow](#)

4,466,980 followers on Google+

Barack Hussein Obama II is the 44th and current President of the United States, and the first African American to hold the office.  
[Wikipedia](#)

**Born:** August 4, 1961 (age 52), Honolulu, HI  
**Spouse:** Michelle Obama (m. 1992)  
**Parents:** Ann Dunham, Barack Obama Sr.  
**Children:** Natasha Obama, Malia Ann Obama  
**Siblings:** Maya Soetoro-Ng, Mark Okoth Obama Ndesandjo, [More](#)  
**Education:** Harvard Law School (1988–1991), [More](#)

### Recent posts


Big news: President Obama is taking action to protect LGBT workers from discrimination. <http://ofa.bo/c0JK> Jul 21, 2014

### People also search for


[View 15+ more](#)




[Michelle Obama](#)




[Vladimir Putin](#)



[George W. Bush](#)



[Hillary Rodham Clinton](#)



[Mitt Romney](#)

CS@UVA

CS 6501: Information Retrieval

4

# Bing's



74,800,000 RESULTS

Any time ▾

## [News about Obama](#)

[bing.com/news](#)



[On Obama's private L.A. schedule: a meeting with Father Boyle](#)  
[Chicago Tribune](#) · 21 minutes ago

President **Obama** met privately with Father Gregory Boyle of Los Angeles' Homeboy Industries and four former gang members Thursday as part of the White House's...

## [Obama Wants Limits on US Company Mergers Abroad](#)

[ABC News](#) · 12 hours ago

## [Obama is attending events for super PACs he once railed against. Here's what he said.](#)

[Washington Post](#) · 10 hours ago

See also: [More stories](#) · [Top stories](#)

★ Stay up-to-date on this news topic

## [Barack Obama - Wikipedia, the free encyclopedia](#)

[en.wikipedia.org/wiki/Barack\\_Obama](#) ▾

"**Obama**" redirects here. For other uses, see **Obama** (disambiguation). This article is about the 44th president of the United States. For his father, see **Barack Obama, Sr.**  
[Early life and career](#) · [Legislative career](#) ... · [Presidential campaigns](#)

## [Barack Obama - Official Site](#)

[www.barackobama.com](#) ▾

OFA works to ensure the voices of ordinary Americans are heard in Washington, while training the next generation of grassroots organizers who will keep fighting for ...

## [The White House](#)

[www.whitehouse.gov](#) ▾

Day in the Life. President **Obama** is traveling over the course of the summer to speak directly with the people he's working for every day.

[Contact](#) · [Live Streams](#) · [Tours & Events](#) · [President's Schedule](#)

## [President Barack Obama | The White House](#)

[www.whitehouse.gov/administration/president-obama](#) ▾

Barack H. **Obama** is the 44th President of the United States. His story is the American story — values from the heartland, a middle-class upbringing in a strong ...



## Barack Obama

Barack Hussein Obama II is the 44th and current President of the United States, and the first African American to hold the office. Born in Honolulu, Hawaii, Obama is a graduate of Columbia University and Harvard Law School, where he served as president of the Harvard Law Review. He was a community organizer in Chicago before earning ... +

[en.wikipedia.org](#)



**Born:** Aug 04, 1961 (age 52) · [Honolulu, Hawaii](#)

**Height:** 6' 1" (1.85 m)

**Spouse:** [Michelle Obama](#) (1992)

**Children:** [Malia Ann Obama](#) · [Natasha Obama](#)

**Parents:** [Barack Obama Sr.](#) · [Ann Dunham](#)

**Office:** President of the United States (2009 - present)

### Listen to audio

- [Barack Obama elected president](#) 1:39
- [Obama signs Health Insurance Reform Bill](#) 1:25
- [President Obama on Osama Bin Laden's death](#) 1:37

# Yahoo's

**YAHOO!**

obama Search

Web

Images

Video

News

Local

Shopping

Maps

More


Anytime

Past day

Past week

Past month

**Barack Obama News**



**Obama** fundraises for Dems, demands GOP cooperation  
Associated Press via Yahoo! News 2 hours ago  
LOS ALTOS, Calif. (AP) — With Congress struggling against time to address key legislation, President Barack **Obama** on Wednesday portrayed Republicans as members of a party that "has no agenda other..."

**Obama** Sends Team to Assess Using National Guard at Border  
Bloomberg 10 minutes ago

**Obama** kicks off Western fundraising amid crises - How **Obama** is saving DNC money at your expense  
Fox News 18 hours ago

More Barack **Obama** Headlines

**Barack Obama** - Organizing for Action  
[www.barackobama.com](http://www.barackobama.com) Cached









OFA works to ensure the voices of ordinary Americans are heard in Washington, while training the next generation of grassroots organizers who will keep fighting for ...


[About OFA](#) [Blog](#)  
[Issues](#) [Store](#)  
[Volunteer](#) [Contact Us](#)

**Barack Obama** - Wikipedia, the free encyclopedia  
[en.wikipedia.org/wiki/Barack\\_Obama](http://en.wikipedia.org/wiki/Barack_Obama) Cached

**Obama** was born on August 4, 1961, at Kapi 'olani Maternity & Gynecological Hospital (now Kapi 'olani Medical Center for Women and Children) in Honolulu, Hawaii ...

**Obama** - Image Results










**Barack Obama**  
44th President of the United States  
© Getty Images

Barack Hussein Obama II is the 44th and current President of the United States, and the first African American to hold the office. [wikipedia.org](http://wikipedia.org)

**Born:** August 4, 1961 (age 52), Honolulu, Hawaii, USA  
**Nationality:** American  
**Height:** 6' 0" (1.85m)  
**Spouse:** Michelle Obama (m. 1992-present)  
**Parents:** Ann Dunham, Barack Obama Sr.  
**Children:** Natasha Obama, Malia Ann Obama

**Movies & TV Shows**



[By the People: The...](#) [Cesky mir](#) [Crossfire](#) [Dirty Wars](#) [We Steal Secrets: The...](#)

[Feedback](#)

Also Try

[obama health care plan](#)  
[obamacare](#)

# What are there




It has been there since the search engine was born

- A list of links to the search result page
  - Text summarization of the retrieved document
    - Title + text snippet
- Search suggestions
  - Related search
  - Spelling correction
  - Query auto-completion
- Vertical search
  - Image, shopping, news
- Knowledge graph
  - As a result of NLP techniques

*Simple Q&A*



# Query auto-completion



obama **care**


obama **approval rating**

obama **student loan forgiveness**

obama **impeachment**

About 146,000,000 results (0.51 seconds)

## News for obama



**'Unchecked' Putin puts pressure on Obama to take 'decisive ...**  
Fox News - 27 minutes ago  
The **Obama** administration has taken a decidedly tougher tone than Europe against Putin since the start of the Ukraine crisis, but a failure to act ...


**Obama to Urge Central American Leaders to Slow Wave of ...**  
New York Times - 3 hours ago

**Obama could be impeached, White House aide says**  
USA TODAY - 6 minutes ago

[More news for obama](#)

## Barack Obama

[www.barackobama.com/](http://www.barackobama.com/) ▾ Barack Obama ▾  
Sign the petition to say it's time to give America a raise. Sign the petition. "You and I, as citizens, have the power to set this country's course." —President **Obama**.



**Barack Obama**

Follow

4,472,607 followers on Google+

Barack Hussein Obama II is the 44th and current President of the United States, and the first African American to hold the office. [Wikipedia](#)

**Born:** August 4, 1961 (age 52), [Honolulu, HI](#)

**Spouse:** [Michelle Obama](#) (m. 1992)

**Parents:** [Ann Dunham](#), [Barack Obama Sr.](#)



# Direct answers

- Advanced version of “I’m feeling lucky”

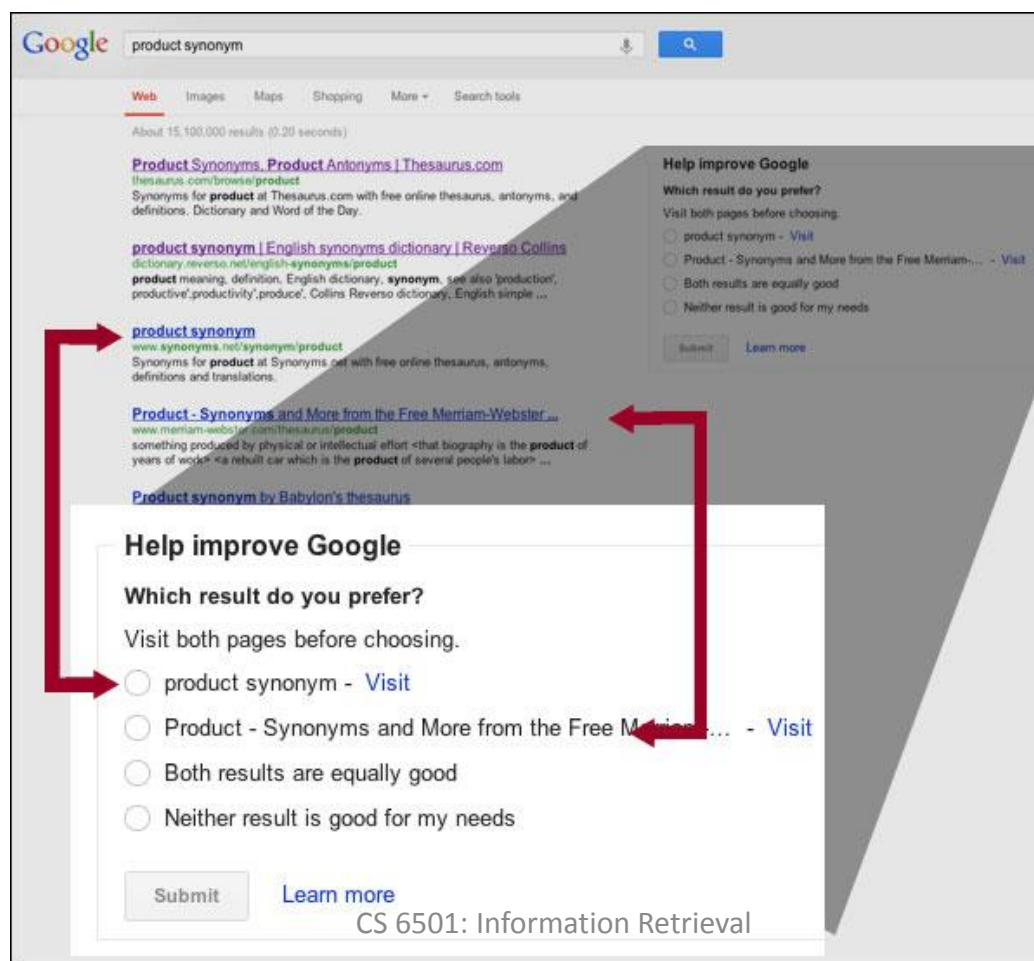
The screenshot shows a Bing search interface. The search bar contains the word "weather" and a magnifying glass icon. Below the search bar, it says "334,000,000 RESULTS" and "Any time" with a dropdown arrow. The main result is a weather widget for "Urbana, Illinois 61801". It includes a link to "bing.com/weather" and "Data from AccuWeather". The current weather is "68°F Cloudy" with a cloud icon. To the right, there is a 5-day forecast table:

Fri	Sat	Sun	Mon	Tue
79° / 65°	87° / 72°	86° / 62°	74° / 55°	75° / 56°

At the bottom of the widget, there is a star icon and the text "Stay up-to-date on this location's weather".

# Experimental features

- Search result feedback



# Experimental features

- Collaborative ranking

The screenshot shows a Google search for "internet marketing firm" with approximately 15,600,000 results. The left sidebar includes filters for "Everything", "Images", "Videos", "News", "Shopping", "Realtime", and "More", along with location ("Gainesville, GA") and time filters. The main results area displays several ads and organic search results. Three red arrows highlight experimental features: one points to the "+1" button on the "Internet Marketing Firm | Full Media" result, another points to the "+1" button on the "Reciprocal Consulting" result, and a third points to a social sharing bar at the bottom of the "Full Media" result that includes a Twitter share link and a prompt to see what friends are talking about.

Google

internet marketing firm

About 15,600,000 results (0.15 seconds)

Advanced search

Everything  
Images  
Videos  
News  
Shopping  
Realtime  
More

Gainesville, GA  
Change location

Any time  
Latest  
Past 24 hours  
Past 2 days  
Past week  
Past month  
Past year  
Custom range...

All results  
Wonder wheel  
Related searches  
More search tools

**Internet Marketing Firm - Top Internet Marketing Company** Ad  
Free Consultation. SEO, PPC & More.  
SEO - PPC - Social Media Marketing - Website Design  
[reciprocalconsulting.com/Marketing](http://reciprocalconsulting.com/Marketing)

Related searches: [search engine marketing firm](#) [web marketing agency](#)

**Reciprocal Consulting™ - Internet Marketing Firm**   
They know what they are doing and they care about our bottom line. What else can you ask from an **Internet Marketing Company**? Daniel Odio DROdio Realty.  
Social Media Optimization - About Us - PPC Pay Per Click Management  
[www.reciprocalconsulting.com/](http://www.reciprocalconsulting.com/) - Cached - Similar

**Internet Marketing Company | Top Agency for SEO, PPC, SEM Services**   
Internet Marketing Inc is a Global **Internet Marketing company** specializing in SEO, PPC, Online Reputation Management, Web Design, Social Media, ...  
[www.internetmarketinginc.com/](http://www.internetmarketinginc.com/) - Cached - Similar

**Internet Marketing Firm | Full Media**   
You +1'd this publicly. [Undo](#)  
FullMedia is a Leading **Internet Marketing Firm** and Web Design Company that helps organizations grow through more effective use of the web.  
Gainesville - Internet Marketing Company Tour - Atlanta - Services  
[www.fullmedia.com/](http://www.fullmedia.com/) - Cached - Similar  
 Anthony Defoor shared this on Twitter - Mar 3, 2010  
Want to see which results your friends are talking about? Are you [lwpickens?](#)  
  [Learn more](#)

# Experimental features

- Social panel

The screenshot shows a search engine results page for the query "social media". The search bar at the top shows "social media" and a magnifying glass icon. Below the search bar, it says "821,000,000 RESULTS". The results are categorized into "Ad", "Social Media Sites", "What Is Social Media", "Buddy Media Product Suite", "RELATED SEARCHES", and "Videos of social media".

**Ad:** Social Media Dashboard. www.HootSuite.com - All Your Social Network Profiles in One Platform. Try Now!

**Social Media Sites:** www.Capterra.com. Social Network Platforms. Free Reviews, Demos, & Phone Consult!

**What Is Social Media:** Ask.com. Get Answers & References On Ask.com. Try Asking Now!

**Buddy Media Product Suite:** www.BuddyMedia.com. Build & Design Custom Social Pages for Your Business with Buddy Media. See your message here

**RELATED SEARCHES:** Social Media Cartoons, Social Media Websites, Social Media Examples, Social Media Marketing, Social Media Definition, Social Media Background Checks, Social Networking, Best Social Media Websites

**Videos of social media:** bing.com/videos. A row of video thumbnails with titles: "ABC Nightline: Facebook IPO: Li...", "The Social Sphere's Take o...", "Here's Why Social Media Wants Yo...", "Facebook IPO: Little Gain After ...".

**Search Results:**

- Social media - Wikipedia, the free encyclopedia**  
en.wikipedia.org/wiki/Social\_media  
Social media - Purpose - Managing social media - Building "social ...  
Social media includes web-based and mobile based technologies which are used to turn communication into interactive dialogue between organizations, communities, and ...
- Social Media News and Web Tips - Mashable - The Social Media**  
mashable.com  
Social Media news blog covering cool new websites and social networks: Facebook, Google, Twitter, MySpace and YouTube. The latest web technology news, via RSS daily.
- Digital Atlanta**  
digitalatlanta.org  
Join us at Yard House for our first happy hour to kickoff Digital Atlanta 2012! Sign up to volunteer, learn about what's in store for this year, and see old friends!
- News about social media**  
bing.com/news  
GroupM Selects Buddy Media as Preferred Social Ad Partner Globally  
NEW YORK, May 21, 2012 /PRNewswire via COMTEX/ -- Buddy Media, the social enterprise software of choice for eight of the world's top ten global advertisers, today announced that GroupM has selected the company's... Marketwatch - 9 minutes ago  
Monday's Musing: Avoiding Social Media Fatigue Through Engagement Forbes  
Do you have enough social-media savvy for your city? ZDNet

The screenshot shows a social media profile page for a user named "Delaney". The profile picture is a small square icon. The name "Delaney" is displayed next to a dropdown arrow and a follower count of "25". Below the profile information is a search bar with the placeholder text "Ask friends..." and a Facebook "f" logo. The page is divided into several sections:

- FRIENDS WHO MIGHT KNOW**  
Why are your friends here?  
Kevin B. Morrow likes Social Media Breakfast Atlanta  
Carol Flammer likes Social Media Breakfast Atlanta  
Marius Popescu likes Facebook  
Matt Alex Gooden likes Facebook  
John Underwood likes Facebook
- PEOPLE WHO KNOW**  
Who are these people?  
KINSEY SCHOFIELD tweeted  
Mari Smith is on Twitter  
Jazz Baker tweeted  
Charlene LI is on Twitter  
Christina Warren is on Twitter
- ACTIVITY**  
What is this?  
No more content to show

# Instant search

The screenshot shows a Google Instant search interface. The search bar contains the text "redownload itunes purchases". To the left of the search bar is the Google logo. Below the logo are links for "Everything", "Images", "Videos", "Discussions", and "More". To the right of the search bar is a "Search" button. Below the search bar is a list of suggested search terms: "redownload itunes purchases", "redownload itunes", "redownload amazon mp3", "redownload itunes music", and "redownload". Below the suggested terms is a blue banner that says "Welcome to Google Instant" and "Feelings of euphoria and weightlessness are normal. Do not be alarmed. Learn more". Below the banner is the text "About 6,520 results (0.34 seconds)" and "Advanced search". Below the results is a list of search results. The first result is "Yes, You Can Download All of Your iTunes Purchases Again - The ...". The second result is "How to re-download iTunes purchased music? - Mac Forums". The third result is "iTunes Audiobook redownload". The fourth result is "Redownload an iTunes Store Purchase - Replacement iTunes Store ...". The fifth result is "How to redownload itunes purchases | eHow.com".

Google

redownload itunes purchases

The start of our search

Google-suggested search terms

redownload itunes purchases  
redownload itunes  
redownload amazon mp3  
redownload itunes music  
redownload

Welcome to Google Instant

Feelings of euphoria and weightlessness are normal. Do not be alarmed. [Learn more](#)

About 6,520 results (0.34 seconds) [Advanced search](#)

Show search tools

Instant search results

[Yes, You Can Download All of Your iTunes Purchases Again - The ...](#) ☆  
Most Recent Searches that Led to This Page: **redownload itunes purchases**, how to **redownload itunes purchases**, **redownloading itunes purchases**, ...  
[www.theinternetpatrol.com/yes-you-can-download-all-of-your-itunes-purchases-again/](#) - Cached - Similar

[How to re-download iTunes purchased music? - Mac Forums](#) ☆  
May 8, 2009 ... I thought the process would be as simple for **iTunes purchased** music where I could go to my account and **redownload** it, but I can't seem to see an option for ...  
[forums.macrumors.com](#) > ... > iPod and iTunes Discussion - Cached - Similar

[iTunes Audiobook redownload](#) - Aug 16, 2010  
[redownload games from iTunes](#) - Oct 21, 2007  
[Re-Download Purchased iTunes Songs](#) - Oct 25, 2005  
[Redownload iTunes purchases](#) - Jan 28, 2005  
[More results from forums.macrumors.com](#) »

[Redownload an iTunes Store Purchase - Replacement iTunes Store ...](#) ☆  
Help! I accidentally deleted a file I bought at the iTunes Store. How do I get it back without buying it again?  
[ipod.about.com/od/itunesproblems/ff/re\\_dl\\_purchase.htm](#) - Cached - Similar

[How to redownload itunes purchases | eHow.com](#) ☆  
May 17, 2010 ... How to **redownload itunes purchases**. You can redownload any Tunes purchases—including applications, music, video and podcasts—if you have ...



# Carrot2's folder display

The screenshot shows the Carrot2 search interface. At the top, there's a navigation bar with icons for Web, Bing, News, Images, Wiki, Jobs, PubMed, and PUT. A search bar contains the text 'obama' and a 'Search' button. Below the search bar, there are tabs for 'Folders', 'Circles', and 'FoamTree'. The 'Folders' tab is active, displaying a hierarchical list of folders on the left side. These folders are organized into a tree structure, with 'All Topics (85)' at the top, followed by 'Election (9)', '44th President of the United States (8)', 'Barack Hussein Obama (7)', 'Presidential (7)', 'Obama for America (6)', 'Politics (6)', 'White House (6)', 'Wikipedia (6)', 'Breaking News (4)', and 'Inauguration (4)'. A blue arrow points from the text 'Organized results' to the 'more | show all' link at the bottom of the folder list. The right side of the interface displays 'Top 85 results of about 49500000 for obama'. The results are numbered 1 through 8, each with a title, a brief description, and a URL. The results include links to the official Barack Obama website, Wikipedia, The White House, Twitter, Politico, Biography.com, Facebook, and Bloomberg.

Web Bing News Images Wiki Jobs PubMed PUT

obama Search More options

Folders Circles FoamTree

All Topics (85)

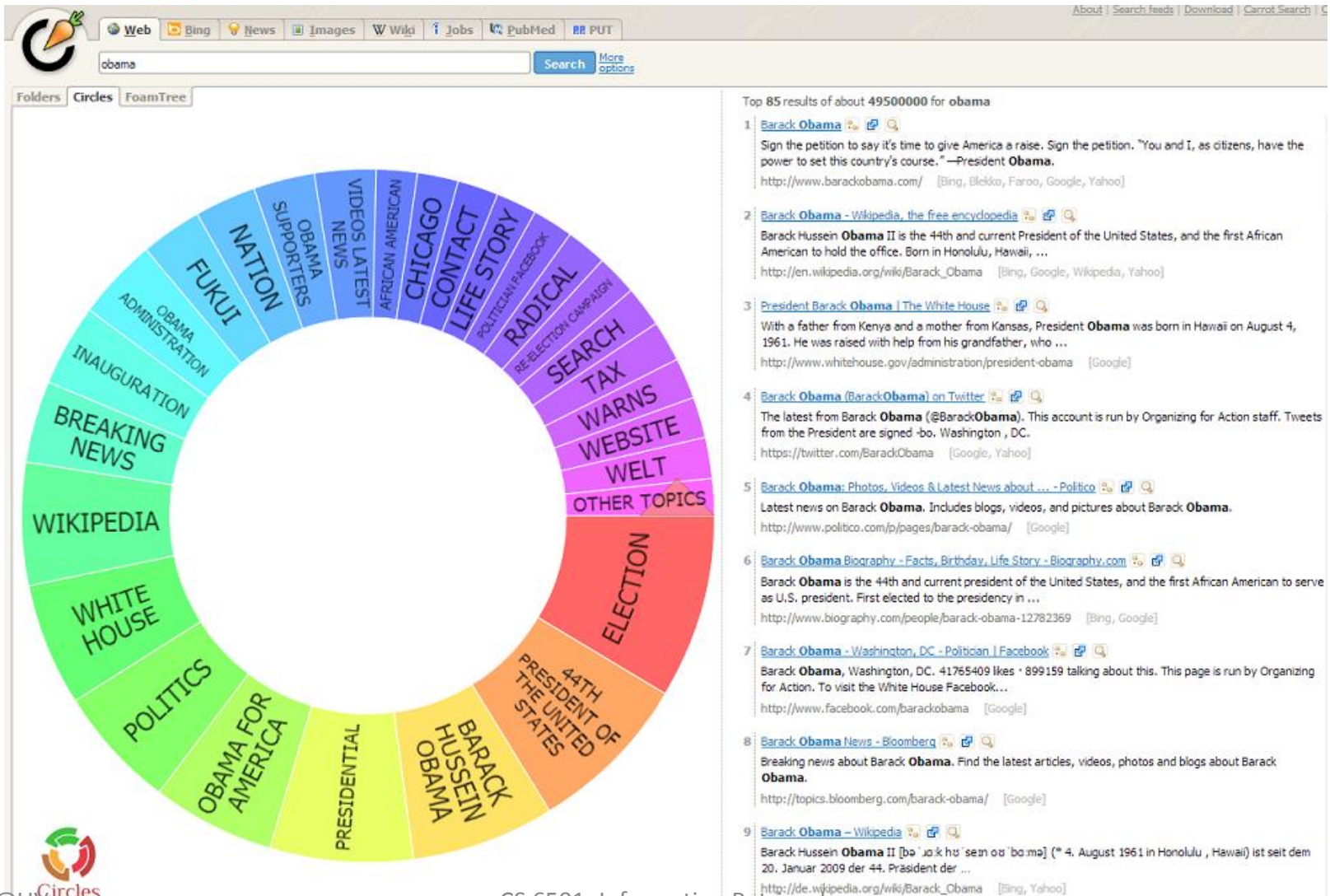
- Election (9)
- 44th President of the United States (8)
- Barack Hussein Obama (7)
- Presidential (7)
- Obama for America (6)
- Politics (6)
- White House (6)
- Wikipedia (6)
- Breaking News (4)
- Inauguration (4)
- more | show all

Organized results

Top 85 results of about 49500000 for obama

- Barack Obama** Sign the petition to say it's time to give America a raise. Sign the petition. "You and I, as citizens, have the power to set this country's course." —President **Obama**.  
<http://www.barackobama.com/> [Bing, Blekko, Faroo, Google, Yahoo]
- Barack Obama - Wikipedia, the free encyclopedia** Barack Hussein **Obama** II is the 44th and current President of the United States, and the first African American to hold the office. Born in Honolulu, Hawaii, ...  
[http://en.wikipedia.org/wiki/Barack\\_Obama](http://en.wikipedia.org/wiki/Barack_Obama) [Bing, Google, Wikipedia, Yahoo]
- President Barack Obama | The White House** With a father from Kenya and a mother from Kansas, President **Obama** was born in Hawaii on August 4, 1961. He was raised with help from his grandfather, who ...  
<http://www.whitehouse.gov/administration/president-obama> [Google]
- Barack Obama (@BarackObama) on Twitter** The latest from Barack **Obama** (@BarackObama). This account is run by Organizing for Action staff. Tweets from the President are signed -bo. Washington , DC.  
<https://twitter.com/BarackObama> [Google, Yahoo]
- Barack Obama: Photos, Videos & Latest News about ... - Politico** Latest news on Barack **Obama**. Includes blogs, videos, and pictures about Barack **Obama**.  
<http://www.politico.com/p/pages/barack-obama/> [Google]
- Barack Obama Biography - Facts, Birthday, Life Story - Biography.com** Barack **Obama** is the 44th and current president of the United States, and the first African American to serve as U.S. president. First elected to the presidency in ...  
<http://www.biography.com/people/barack-obama-12782369> [Bing, Google]
- Barack Obama - Washington, DC - Politician | Facebook** Barack **Obama**, Washington, DC. 41765409 likes · 899159 talking about this. This page is run by Organizing for Action. To visit the White House Facebook...  
<http://www.facebook.com/barackobama> [Google]
- Barack Obama News - Bloomberg** Breaking news about Barack **Obama**. Find the latest articles, videos, photos and blogs about Barack **Obama**.  
<http://topics.bloomberg.com/barack-obama/> [Google]

# Carrot2's circle display





# Carrot2's foam tree display

The screenshot shows the Carrot2 web interface with a search for "obama". The main feature is a "FoamTree" visualization where topics are represented as colored, irregular polygons of varying sizes, clustered together. The central and largest node is "Barack Hussein Obama". Other prominent nodes include "White House", "Election", "Politics", "44th President of the United States", "Obama Administration", "Search", "Life Story", "Videos Latest News", "Website", "Nation", "Chicago", "Welt", "Breaking News", "Presidential", "Obama for America", "Wikipedia", "Inauguration", "Tax", "Fukui", "Re-election Campaign", "Obama Supporters", "Contact", "Radical", "Warns", "Other Topics", and "African American".

On the right side, there is a list of search results for "obama":

- Barack Obama** - Sign the petition to say it's time to give America a raise. Sign the petition. "You and I, as citizens, have the power to set this country's course." President **Obama**.  
<http://www.barackobama.com/> [Bing, Baidu, Faroo, Google, Yahoo]
- Barack Obama** - Wikipedia, the free encyclopedia - Barack Hussein **Obama** II is the 44th and current President of the United States, and the first African American to hold the office. Born in Honolulu, Hawaii, ...  
[http://en.wikipedia.org/wiki/Barack\\_Obama](http://en.wikipedia.org/wiki/Barack_Obama) [Bing, Google, Wikipedia, Yahoo]
- President Barack Obama** | The White House - With a father from Kenya and a mother from Kansas, President **Obama** was born in Hawaii on August 4, 1961. He was raised with help from his grandfather, who ...  
<http://www.whitehouse.gov/administration/president-obama> [Google]
- Barack Obama (BarackObama)** on Twitter - The latest from Barack **Obama** (@BarackObama). This account is run by Organizing for Action staff. Tweets from the President are signed -bo. Washington, DC.  
<https://twitter.com/BarackObama> [Google, Yahoo]
- Barack Obama**: Photos, Videos & Latest News about... - Politico - Latest news on Barack **Obama**. Includes blogs, videos, and pictures about Barack **Obama**.  
<http://www.politico.com/pages/barack-obama/> [Google]
- Barack Obama** Biography - Facts, Birthday, Life Story - Biography.com - Barack **Obama** is the 44th and current president of the United States, and the first African American to serve as U.S. president. First elected to the presidency in ...  
<http://www.biography.com/people/barack-obama-12782369> [Bing, Google]
- Barack Obama** - Washington, DC - Politician | Facebook - Barack **Obama**, Washington, DC. 41765409 likes · 899159 talking about this. This page is run by Organizing for Action. To visit the White House Facebook ...  
<http://www.facebook.com/barackobama> [Google]
- Barack Obama** News - Bloomberg - Breaking news about Barack **Obama**. Find the latest articles, videos, photos and blogs about Barack **Obama**.  
<http://topics.bloomberg.com/barack-obama/> [Google]
- Barack Obama** - Wikipedia - Barack Hussein **Obama** II (bəˈdʒʊk hʊˈseɪn ɒzˈbɑːmə) (\* 4. August 1961 in Honolulu, Hawaii) ist seit dem 20. Januar 2009 der 44. Präsident der ...  
[http://de.wikipedia.org/wiki/Barack\\_Obama](http://de.wikipedia.org/wiki/Barack_Obama) [Bing, Yahoo]

# BaiGoogledu

## Meta search engine



首页 展开Google 展开百度

alibaba

每页显示10条

搜索

下一页 收藏本站 提点建议

alibaba

Google 搜索

强力驱动 Google™

网页 找到约 18,200,000 条结果 (用时 0.18 秒)

1688.com, 阿里巴巴打造的全球最大的采购批发平台

阿里巴巴(1688.com)是全球企业间(B2B)电子商务的著名品牌,为数千万网商提供 海量商机信息和便捷安全的在线交易市场,也是商人们以商会友、真实互动的社区 ...

[www.1688.com/](#) - 类似结果

Alibaba.com: Manufacturers, Suppliers, Exporters & Importers from ...

Find quality Manufacturers, Suppliers, Exporters, Importers, Buyers, Wholesalers, Products and Trade Leads from our award-winning International Trade Site.

[www.alibaba.com/](#) - 类似结果

Alibaba Group - Wikipedia, the free encyclopedia

Alibaba Group is a privately owned Hangzhou-based group of Internet-based e-commerce businesses including business-to-business online web portals, ...

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# Considerations in result display

- Relevance
  - Order the results by relevance
- Diversity
  - Maximize the topical coverage of the displayed results
- Navigation
  - Help users easily explore the related search space
    - Query suggestion
    - Search by example

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- In Human-Computer Interaction

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# Search result display in mobile device

- Unique characteristics of mobile device
  - Small screen size, limited bandwidth, input, data-access and computation power
  - Multi-touch screen
  - Rich search context
  - Opportunities?



# What you should know

- General considerations in search result display
- Challenges and opportunities in mobile device search result display