



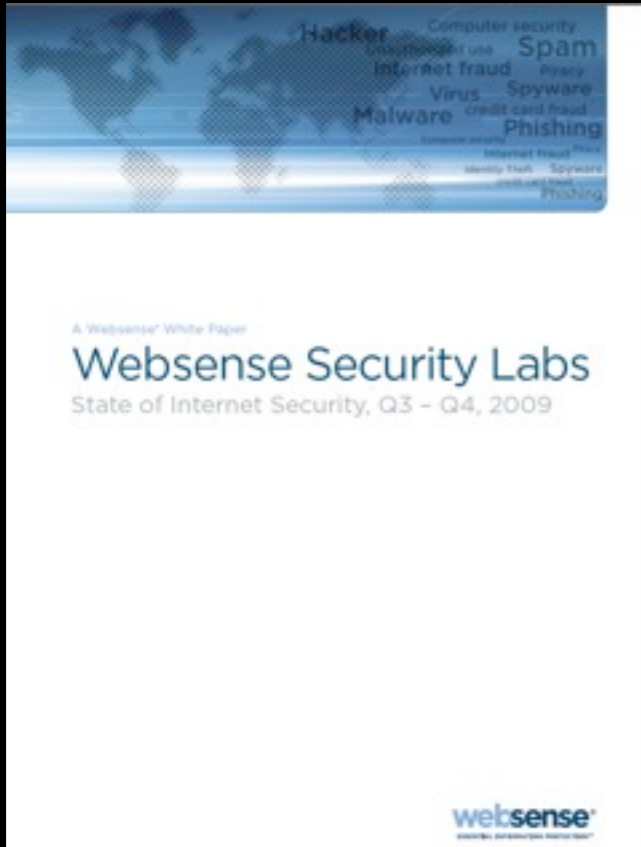
POISONING

SOCIAL



WHY

Dan Hubbard
CTO, @Websense



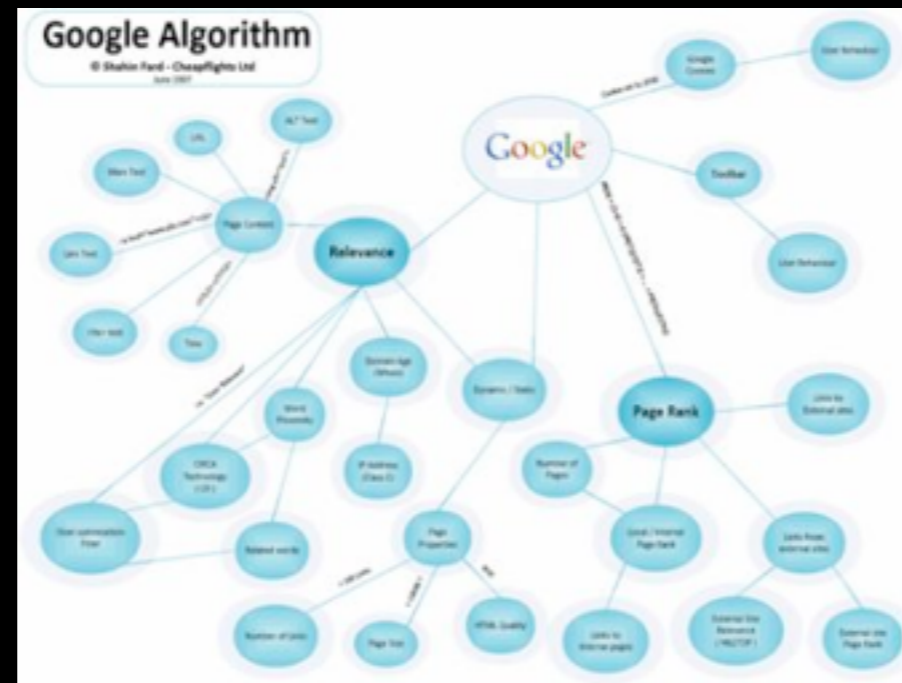
Google™



Golf Clap

Traditional

SEARCH



All about relevance with a sprinkle of prevalence. Oh and perhaps “intent”.

Real-Time

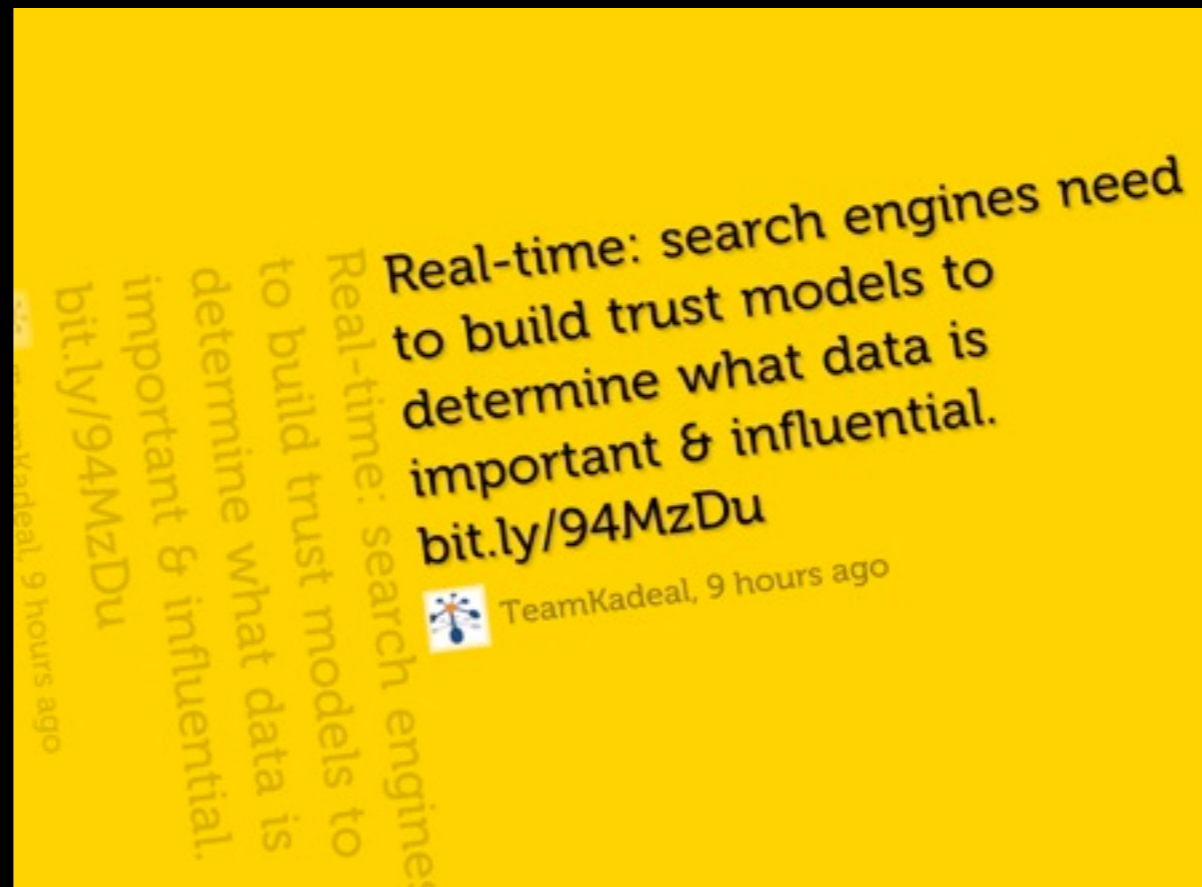


SEARCH

All about time, trends, with a sprinkle of social graph and location.



Sashi Seth...



<http://www.technologyreview.com/web/25110/>

“The sheer amount of real-time data presents unique challenges for search. Because a lot of the data is nonauthoritative, noisy, or spammy, search engines need to build trust models that can determine what data is important and influential.”

“Search engines must also determine the right balance between timeliness and relevance to each user. Further, real-time data needs to be indexed and updated instantaneously.”

scooper Search

Results for: haiti

POPULAR SHARES All Content Videos Links Images

LIVE POSTS Updating in real time

PlayStation Division - Download The Bahamas DLC For Wii U
 Let's be real: the gaming community isn't a caring bunch. A few days ago, Bungie announced that they would be going money to Haiti based on how many players used a...
 10/18/2010 1:14:27 PM ago - 07 shares

Haiti Radio | Earthquake Aftermath
 A Haitian local calls off the coast of Haiti, Jan. 18, 2010, as the amphibious dock landing ship USS Carter Hall operates in the distance. (Shutterstock.com)
 10/18/2010 1:14:27 PM ago - 07 shares

Facebook: Kanye West invited to Haiti Telethon
 As previously reported, Kanye West's bid to be the most famous person to appear on the "Telethon for Haiti Now..."
 10/18/2010 1:14:27 PM ago - 07 shares

Image Results:

OneRiot beta

Web Video

haiti

Trending Topics: NBC, Golden Globes, Haiti, Martin Luther King Jr., Jersey Shore, Shorty Award,

Realtime results Track this topic Sort by: **Pulse** | Realtime

Haiti Radio | Earthquake Aftermath
 "We were so used to power cuts here in Haiti that we had built a special system for when the lights go out," he explained, talking in his hectic...
www.globalpost.com/dispatch/the-americas/100120/haiti-earthquake-aid
 Last shared: seconds ago | 62 shares | [Tweet](#) First shared on by [myworknews](#)

Weasel Zippers: Hugo Chavez New US Weapon Caused Haiti...
 I could have sworn it was Boosh's fault... Danny Glover reportedly intrigued by Comrade Chavez' theory but still thinks it was caused by "global..."
www.weaselzippers.net/_j/hugo-chavez-new-us-weapon-caused-haiti-earthquake...
 Last shared: 6 minutes ago | 23 shares | [Tweet](#) First shared on by [tsugop](#)

Latest tweets for 'haiti'

[jadore_mizzkoo](#) R.I.P to all the innocent, and beautiful soul in haiti. And to those who r still struggling we hear ur cries. -58 seconds ago from UberTwitter - [reply](#) - [retweet](#)

[mister_JT](#) RT @MattMorris: TOMORROW I'm performing with @JTimberlake on Hope For Haiti Now. Click for details. (please RT) <http://tumblr.com/xq5q5vwm> -56 seconds ago from web - [reply](#) - [retweet](#)

thoora Search

DISCOVER WHAT THE WORLD IS TALKING ABOUT

TOP STORIES BUSINESS CONTROVERSY ENTERTAINMENT LIFESTYLE POLITICS SCITECH SPORTS

Entertainment / ALL Movies Television Music Theatre

Leading Story!
NBC, O'Brien reach deal for him to leave 'Tonight'
<http://www.latimes.com>

#1 NEWS 3,779 BLOGS 616 TWEETSHOUR COMMENTS 1,924

Story Stats

News (Unique): 3,779 (1,022)
 Blogs (Unique): 616 (537)
 Twitter: 121 tweets/hour
 Twitter Impact: 1 in 15,200
 Comments: 1,924
 First Popular: 9 Hours ago
 Last Updated: 1 Hour ago
 *Tweets right now about this story [Less stats](#)

Overview **Blogs View** News View Discuss Share

Top Related Blogs

Leno back to Tonight, Conan to Fox?
 It looks like Jay Leno will be going back to The Tonight Show, and Conan O'Brien will leave NBC, perhaps...
 6 Days ago
[JERMSQVY @BLOGSPOT](#) [Comments: 0](#)

NBC's Leno back to late nights
 Jay Leno will move from prime time back to late nights, NBC said Sunday, Los Angeles, ...
 10 Days ago
[THEBLACKURBANTWES](#) [Comments: 0](#)

Video of Jay Leno Giving Conan Show in 2004, "Conan, it's yours..."
 Well, this is most likely to add more fuel to the flames. Someone

News Timeline

LAST 6 HOURS

Conan O'Brien set to leave NBC
 GUARDIAN

Talk show host gets \$45m pay-off
 CO

LAST 24 HOURS

NBC, O'Brien reach deal for him to leave 'Tonight'
 LATIMES

NBC: Conan O'Brien reaches deal to exit 'Tonight' show; deal worth \$45 million
 STARTRIBUNE

LAST 48 HOURS

Signs point to Friday farewell for Conan O'Brien

From Twitter

121 tweets/h

[Melanietp519](#) industry web <http://bit.ly/8SU5JY> Late-night comics pounce on late-night mess at NBC; Kimmel does scathing Leno
 3:16 PM (11/10/10)

COLLECTA beta

Haiti

Hot Now: Haiti, Conan, Supreme Court, John Edwards

Haiti NEW

Options Share Search

- Stories blog posts, articles
- Comments on blog posts
- Updates Twitter, Jaku, Idetica
- Photos Flickr, TwiPic, yFrog
- Videos YouTube, Ustream

Newer Results

Helping Haitians
 Response Fund for Haiti Relief. The contributions from

Canadian celebs participate in benefit for H
 TORONTO (AP) -- Some of Canada's biggest stars

Beyonce Joins MTV's 'Hope For Haiti'
 She will join husband Jay

Haiti's Mass Graves Swell as Health Fears
 Haiti's Mass Graves Swell as Health Fears

Canadian celebs participate in benefit for H
 in benefit for Haiti Canada's biggest in benefit for Haiti Canada

Untitled
 Dibuka, Rabusan Warga Haiti Andre Ambil Uang. BankUang. B



Do we really know
what real-time search is
used for yet?

My .02: NO. This is just
the beginning!



Have we really thought through security models of real-time search?



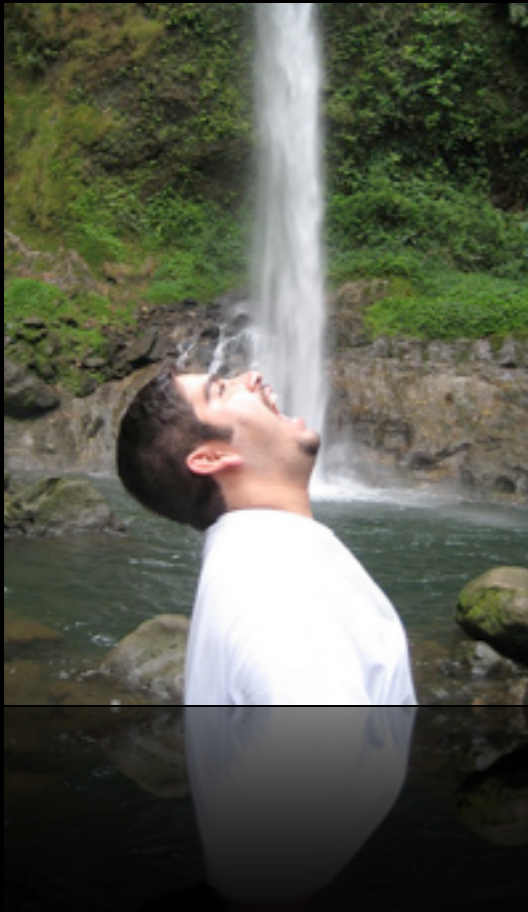
My .02: NO.
This is just the beginning!

Fun-duh-mentals.....

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- API's are very easy to use and open
- API's are anonymous / trace
- Data must be delivered in real-time leaving little room for filter algorithm cycles. Fire-hose dwarfs Moores law in growth
- “Joe the plumber” can compete with CNN.

“In the future we will not look for the NEWS, the NEWS will find us, or we will create the NEWS. The future is NOW”



Quality + Relevance
= Truth

~~Quality + Relevance
= Truth~~



THE TRUTH IS OUT THERE

“Measuring truth and intent is
pretty darn hard and but tricking
man and machines is pretty darn
easy”



Social

HOTTEST SOCIAL TOPICS

- Glee** >
- Carling Cup >
- k Michelle >
- Northampton >
- Lyfe Jennings >
- Registry >
- Birthday Love >
- Newcastle >
- Harvest >
- Svu >

▲ SOURCE

- [Twitter](#)
- [Facebook](#)

▲ TIMEFRAME

- Past Hour**
- [Past Day](#)
- [Past Week](#)

GLEE

[See all social results for this topic](#)

TOP SHARED LINKS

[Pinoy Channel | Pinoy24.TV | Pinoy TV - Charice Actual Audition Video For Glee! \(...\)](#)
www.pinoy24.tv/video/25452/Charice-Actual-Audition-Video-For-Glee-Halo-EMBED-ONLY

[Hulu - Glee: Audition - Watch the full episode now.](#)
www.hulu.com/watch/178226/glee-audition

RECENT PUBLIC UPDATES



Celebrity Gossip: Gwyneth Paltrow will star in two episodes of #Glee as a sub teacher for Glee coach Mr Schuester <http://bbc.in/8XBmYQ> (bbc.co.uk) · Facebook · 2 hours ago



ashsimpsonwentz: Who is ready for glee tonight? @dannukurily might be a little too ready....
<http://twitpic.com/2qpc7w> · Twitter · 1 day ago



Celebrity Gossip: RT @GleeonFOX: Get a sneak peek at next week's all-new Britney / Brittany episode of #GLEE: <http://bit.ly/aojv3s> (youtube.com) · Facebook · 1 hour ago



GLEEonFOX: Check out photos from "Britney/Brittany" airing next TUE at 8/7c! <http://bit.ly/9BwF9d> #GLEE · Twitter · 44 minutes ago

WITHIN THIS TOPIC

People [Britney Spears](#), [Gwyneth Paltrow](#), [John Stamos](#)

Keywords [awesome](#), [amazing](#), [sad](#), [excited](#), [funny](#)



Social

HOTTEST SOCIAL TOPICS

- Glee** >
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GLEE

[See all social results for this topic](#)

TOP SHARED LINKS

[Pinoy Channel | Pinoy24.TV | Pinoy TV - Charice Actual Audition Video For Glee! \(...\)](#)
www.pinoy24.tv/video/25452/Charice-Actual-Audition-Video-For-Glee-Halo-EMBED-ONLY

[Hulu - Glee: Audition - Watch the full episode now.](#)
www.hulu.com/watch/178226/glee-audition

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Time and Trend Hacks

Social Graph Hacking



Geo Hacks



Time and Trend Hacks

Most real-time search engines are based mostly off of the stream in sequence regardless of who you are.

- Grab top trends and simply post tweets linking to malicious sites
- Post from multiple accounts with multiple URL's that all have the same code
- Post with images (exploits) and URL's
- Pause and post. Tweet malicious URL...sleep 10...tweet again with different account....sleep 10...
- Predict future events and post tweets to be first



Time and Trend Hacks



twitter Search [Advanced Search](#)

Results for boston marathon ryan hall 0.09 seconds

- @hubbard858**: Running with Ryan Hall in Boston Marathon <http://twtpic.com/1ghe7r>
half a minute ago from Twtpic · [Reply](#) · [View Tweet](#)
- Pmswanepool**: Ryan Hall falling off the pace of the leaders at the Boston #Marathon
half a minute ago from TweetDeck · [Reply](#) · [View Tweet](#)
- wassdaddy**: Perfect day? Let's have the Sox win, Bruins win, and Ryan Hall win the Boston Marathon.
4 minutes ago from TweetDeck · [Reply](#) · [View Tweet](#)
- wildfire16to80**: At the Boston Marathon 10k checkpoint...Ryan Hall ahead by :01...Keep it up Ryan!! Only 20 miles to go... :)
4 minutes ago from web · [Reply](#) · [View Tweet](#)
- knewdy**: Everyone should cheer for ryan hall (@ryanhal3) to win the boston marathon! He's in the lead pack with 17 miles to go
11 minutes ago from web · [Reply](#) · [View Tweet](#)
- bobbrinker**: Ryan Hall running the Boston Marathon live on Universal Sports TV. 1983 was lat time an American runner won the event.
13 minutes ago from web · [Reply](#) · [View Tweet](#)
- hlyann**: RT @kpstanfil: the 114th Boston Marathon is underway. It's been 27 years since an American male has won. pulling for Ryan Hall and Meb Keflezighi.
13 minutes ago from web · [Reply](#) · [View Tweet](#)

[Feed for this query](#)
[Tweet these results](#)

Show tweets written in:

Trending topics:

- [#nowplaying](#)
- [This Is Apple's Next](#)
- [OMGDUVALFACT](#)
- [#MusicMonday](#)
- [#simplemathematics](#)
- [Justin Bieber](#)
- [#iDont2](#)
- [#fashitag](#)
- [Boston Marathon](#)
- [#moveforward](#)

Nifty queries:

- [cool filter links](#)
- ["is down"](#)
- [movie :\)](#)
- ["happy hour" near SF](#)
- [#haku](#)
- ["listening to"](#)
- [love OR hate](#)
- [light :\)](#)

Google Search [Advanced Search](#)

Web · Latest [Hide options](#)

All results
[Images](#)
[Videos](#)
[News](#)
[Blogs](#)
[Updates](#)
[Books](#)
[Discussions](#)
 Any link
 Latest
[Past 24 hours](#)
[Past week](#)
[Past year](#)
[Specific date range](#)
[Reset options](#)

New results will appear below as they become available. [Pause](#)

Heading back to Dover after covering the 114th Boston Marathon.
JohnDoyle603 - Twitter - 23 seconds ago

I'm sitting on the train with a man who just ran the Boston marathon, he's 72years old [#impressive](#)
emman02136 - Twitter - 52 seconds ago

I finished Boston marathon from San Diego?
@hubbard858 - Twitter - 1 minute ago

my uncle finished the boston marathon :) I finished a drink. [#bostonmarathon](#)
APJen - Twitter - 1 minute ago



Time and Trend Hacks

Latest tweets for 'tweeting from boston marathon'



dhubbard858: tweeting from Boston Marathon in 35,445 place..<http://bit.ly/bgFU6E> 6 minutes ago from web - reply - retweet



nikkib10: Follow @ipadrunner today, it's @jasonjedrusiak running the Boston Marathon. He'll be live tweeting during the race from his ipad! 2 hours 47 minutes ago from web - reply - retweet

[search.twitter.com/search?q=tweeting from boston marathon](http://search.twitter.com/search?q=tweeting+from+boston+marathon)



Google Search [Advanced Search](#)

Web > Latest Hide options

> All results
[Images](#)
[Videos](#)
[News](#)
[Blogs](#)
[Updates](#)
[Books](#)
[Discussions](#)

Any time
 > Latest
[Past 24 hours](#)
[Past week](#)
[Past year](#)

New results will appear below as they become available. [Pause](#)

Great image of **Boston Marathon volcano**
[Websense.com - Web security, email security, data security](#) - websense.com

[dhubbard858](#) - **Twitter** - 20 seconds ago

The **Boston Marathon** has over 26000 registered runners, but the Icelandic **volcano** ash cloud grounded planes forcing some runners to withdraw

[AlesiaPowellCBS](#) - **Twitter** - 30 seconds ago

Volcano means less runners **boston marathon** bit.ly/bgFU6E

[dhubbard858](#) - **Twitter** - 50 seconds ago



Time and Trend Hacks

A screenshot of a search engine results page. On the left is a sidebar with filters for 'boston marathon ryan hall' and 'ryan hall'. The main content area shows search results starting at 8:01:43 am. One result is highlighted with a red arrow pointing from a green angry face icon. To the right is a preview of a tweet from dhubbard858 about a photo of Homer Simpson as Ryan Hall.



A screenshot of the Topsy search engine interface. The search term 'boston marathon ryan hall' is entered in the search bar. The results show two photos. The second photo, which is a cartoon of Homer Simpson as Ryan Hall, is highlighted with a red arrow pointing from the green angry face icon. The interface includes filters for time (All, Month, Day, Hour) and source (Web, Photos, Tweets).



Time and Trend Hacks

erkesso wins boston [Advanced Search](#)

[Hide options](#)

2010 > April > 19 > 7:57am - 8:37am Now

« Older - Newer »

Erkesso wins boston marathon
[Websense.com - Web security, email security, data security](#) - websense.com

[carlLsecurity](#) - [Twitter](#) - Apr 19, 2010 8:35:43 am

Interesting: Teyba **Erkesso** ran 2:23 PR winning Houston in January. Both Dire Tune and Deriba Merga won Houston the year they won **Boston**.

[aislinntx](#) - [Twitter](#) - Apr 19, 2010 8:15:31 am

All results on this page provided by [twitter](#)

erkesso wins boston

0.04 seconds

to see them.

ake it 40oz RT [@nardosina](#): On my the **Boston Marathon!** Elelelelele

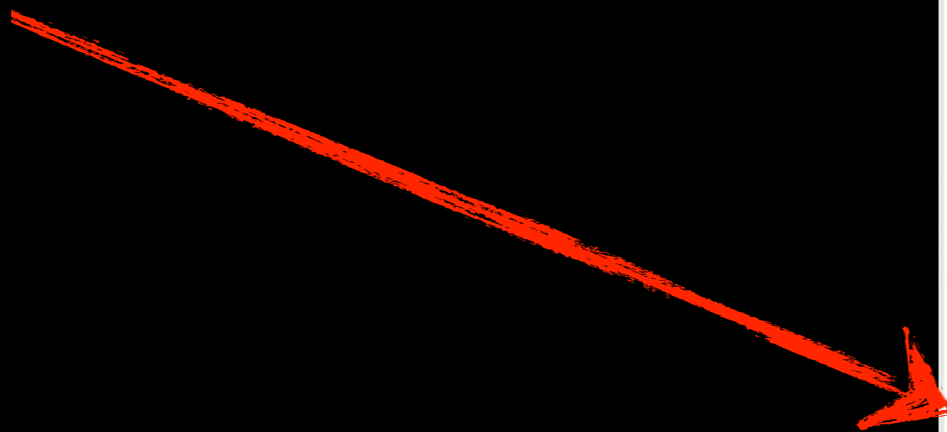
less than 10 seconds ago from [Echofon](#) · [Reply](#) · [View Tweet](#)

[MatthewLaWell](#): [@mollsadol](#) is my [@B A A](#) [#Boston](#) [#Marathon](#) savior. She found a free live feed of the race. <http://bit.ly/9tieN5> (expand) less than 20 seconds ago from [HootSuite](#) · [Reply](#) · [View Tweet](#)

[MichaelSheeley](#): RT [@Xconomy](#): Boston's Skyhook Wireless, FitnessKeeper (aka [@RunKeeper](#)) use **Boston Marathon** to highlight location-aware apps <http://bit.ly/CP4fva> (expand) less than 20 seconds ago from [TweetDeck](#) · [Reply](#) · [View Tweet](#)

[dhubbard858](#): Hubbard wins **Boston Marathon** <http://www.websensesecuritylabs.com> half a minute ago from web · [Reply](#) · [View Tweet](#)

[rach_e](#): If anyone wants to follow the **Boston marathon** on Twitter, start following [@bostonmarathon](#). Updates every 2 mins or so! half a minute ago from [TweetDeck](#) · [Reply](#) · [View Tweet](#)





Time and Trend Hacks

Typo-attacks working well



Twitter / Home | Phoenix protests - Goog...

http://www.google.com/search?hl=en&tbo=1&tbs=mb:1&q=Phoenix+protests&aq=f&aqi=&aql=&oq=&gs_rf

Daily's | Work | websense | Family | Google | Other Bookmarks

Web Images Videos Maps News Shopping Gmail more | Web History | Search settings | Sign in

Google Phoenix protests Search Advanced Search

Web > Updates Hide options

All results
Images
Videos
News
Blogs
Updates
Books
Discussions
Any time
Reset options

Did you mean: [Phoenix protests](#)

2010 > April > 25 - ☐

« 11am 5pm 11pm 5am

New results will appear below as they become available. [Pause](#)

locontrol: The **protests** going on in **Pheonix** against HR are incredible:
[bit.ly/6aF9iV](#)
Twitter - 14 seconds ago

silver9481: RT @barbiesnow: ... There is going to be a huge rally in **Phoenix** on May 1st (not Cinco de Mayo) 2 **protest #AZ** ...
[ProtestArizona.com - Deport White Supremacy out of Arizona!](#) - protestarizona.com
Twitter - 48 minutes ago

nsaidi: Built a [@cnnireport](#) flickr gallery showing some of the AZ immigration **protests** in **Phoenix**, other places. [bit.ly/9fegnk](#)
Twitter - 56 minutes ago

KennyActon: Opponents of Arizona's new immigration enforcement law **protest** outside the state capitol building in **Phoenix**, Arizona.
Twitter - 2 hours ago

refford: 2800 gather at **Phoenix** rally yesterday to continue **protest** against AZ racial-profiling law:
[At Phx. rally, 2,800 vow to thwart immigrant law](#) - azstarnet.com

Top links

[In Phoenix, thousands protest anti-immigrant law - Osha Gray ...](#)
Chanting ¡Si, se puede! waving American flags and holding signs declaring "Legalize Arizona," approximately 4000 people -- some of whom ...
[http://trueslant.com/.../in-phoenix-thousands-...](#)
[All mentions >](#)

[Hundreds protest immigration law in Arizona - CNN.com](#)
Phoenix, Arizona (CNN) -- Hundreds of people gathered outside Arizona's Capitol building on Sunday in a largely peaceful **protest** ...
[http://www.cnn.com/.../protest/index.html](#)
[All mentions >](#)



Social Graph Hacking

Some real-time search providers attempt to map social graphs into their relevance algorithms.

- Getting followers and following in Twitter
- Seeding the engines with good posts over time
- Taking control of good accounts for bad purposes (app attack)
- Linking accounts across data streams (Facebook, Twitter, Myspace, etc).



Social Graph Hacking

- who are you?
- who do you know?
- who do they know?
- who are you following?
- who are they following?
- who is following you?
- where are you?

Every Dimension = a revenue opportunity but also an additional attack surface



Social Graph Hacking

Welcome! Sign in or register.

CATEGORIES FASHION MOTORS STORES DAILY DEAL

Search [Advanced Search]

twitter followers

Related Searches: twitter, twitter account, facebook, facebook friends, myspace friends, facebook fans, youtube subscribers, myspace

Home > Buy > Search results for "twitter followers"

54 results found for twitter followers

Sort By: Price + Shipping: lowest first

Item	Price + Shipping to 92009	Time Left
TWITTER ADVERTISING TO 4400 FOLLOWERS - 3TWEETS	1 Bid \$0.99 <small>Free shipping</small>	6d 4h 36m
4 Tweet Advertisements to 1,200+ Twitter Followers	Buy It Now \$1.00 <small>Free shipping</small>	6d 4h 59m
TWITTER ADVERTISING TO 4400 FOLLOWERS - 3TWEETS	3 Bids \$1.29 <small>Free shipping</small>	1d 21h 14m
Your Ad On Twitter 4 ONLY 1.99 (Over 28,000 Followers)	Buy It Now \$1.99 <small>Free shipping</small>	3d 1h 56m
Advertise on Twitter to Our 22k+ Followers as low as \$5	Buy It Now \$5.00 <small>Free shipping</small>	14d 12h 52m
1000 Twitter Followers 7-10 days (plus freebies!)	0 Bids \$5.95 <small>Free shipping</small>	33m

Refine search

Categories

- Business & Industrial (42)
- Businesses & Websites for Sale (41)
- Retail & Services (1)
- Specialty Services (8)
- Web & Computer Services (8)
- See all categories

Price

Condition

- New
- Used
- Not specified
- Choose more...

Seller

- eBay Top-rated sellers
- Specify sellers...

Preferences

Buying formats

- Auction
- Buy It Now
- Choose more...

Show only

- Completed listings
- Free shipping



Social Graph Hacking

Dan Hubbard,
Your application to be an Ad.ly advertiser has been APPROVED and now needs your activation.

To complete your sign up, [activate your account here](http://ad.ly/account/activation/ZGh1YmJhcmRAd2Vic2Vuc2UuY29t:2mc:160b3a34c8da12dc6925) or copy and paste the following link in your browser:
<http://ad.ly/account/activation/ZGh1YmJhcmRAd2Vic2Vuc2UuY29t:2mc:160b3a34c8da12dc6925>

As an approved advertiser, you can now access our self-service platform and advertise with any Ad.ly publisher.

If you have any questions, please email advertisers@ad.ly

- Ad.ly Team


Signup as an
advertiser (ad.ly)
and pay people:
\$10,000 per Tweet
to reach 3.2
Million
followers!!!!

Twitter Publisher	Followers	\$ Per Tweet	
TechCrunch	1,365,601	\$10,000	More Info >
Ryan Sheckler	1,505,148	\$8,750	More Info >
Nick Cannon	1,672,417	\$7,200	More Info >
Gossip Girl	1,460,957	\$6,800	More Info >
LeVar Burton	1,604,168	\$6,250	More Info >
Paul Pierce	1,516,711	\$5,734	More Info >
Dr. Drew	1,900,493	\$5,349	More Info >
soleil moon frye	1,423,962	\$5,200	More Info >
Denise Richards	1,617,659	\$5,000	More Info >
Eliza Dushku	521,444	\$4,300	More Info >
CBOE	761,230	\$3,783	More Info >
Mandy Moore	1,915,490	\$3,500	More Info >
Greg Grunberg	1,416,300	\$3,445	More Info >
Lauren Conrad	961,567	\$3,027	More Info >



Social Graph Hacking

“NBA playoffs”

Twitter Publisher	Followers	\$ Per Tweet
 Paul Pierce	1,517,406	\$5,734

These guys put the fun in funeral!
 Check out Chris Rock & Tracy Morgan in @DeathAtAFuneral. Get
 tix <http://bit.ly/bZ5TC1>
 #NowPlaying (Ad)

6:15 PM Apr 15th via Ad.ly Network



1200 clicks on release. Is it worth it?



Social Graph Hacking




Compromise a well known user. Its cheaper than buying tweets.

High profile Twitter hack spreads porn Trojan

Malware posted to Guy Kawasaki's Twitter page attacks the Mac and the PC

By [Robert McMillan](#), IDG News Service

June 23, 2009 08:41 PM ET

+ New Campaign All Campaigns List of Publishers Billing			
Twitter Publisher	Followers	\$ Per Tweet	
 Guy Kawasaki	226,619	\$778	More Info >



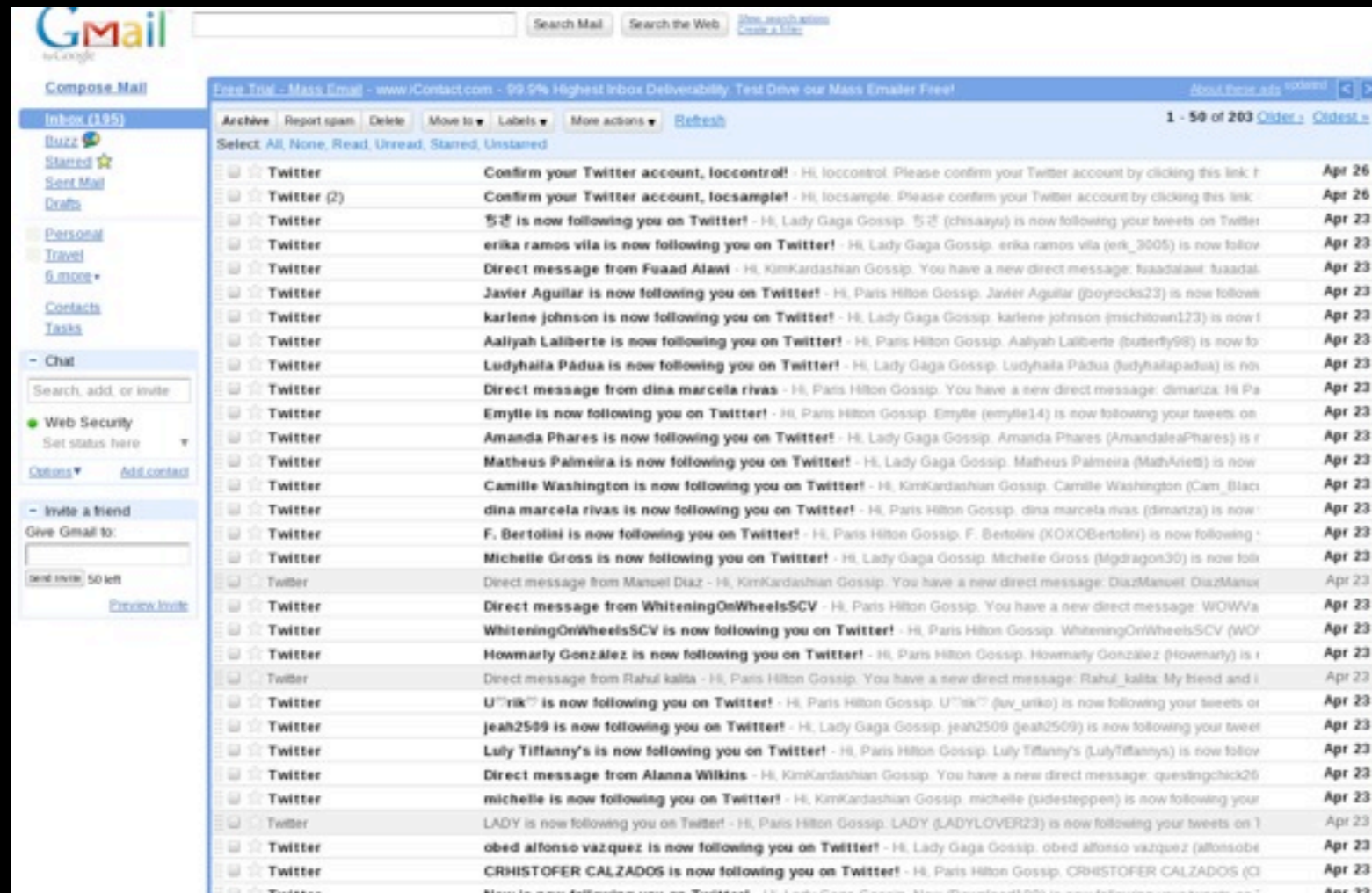
Social Graph Hacking

- ✓ Getting people to follow you is pretty easy
- ✓ Look for spammers first...(not too hard)
- ✓ Look for people who are clearly auto-following
- ✓ Follow the auto-followers, they will follow you
- ✓ Add an account that has social / timely characteristics and then start following people in the same peer group
- ✓ Recommendation: simulate clicks and don't use the API's to go under the radar longer





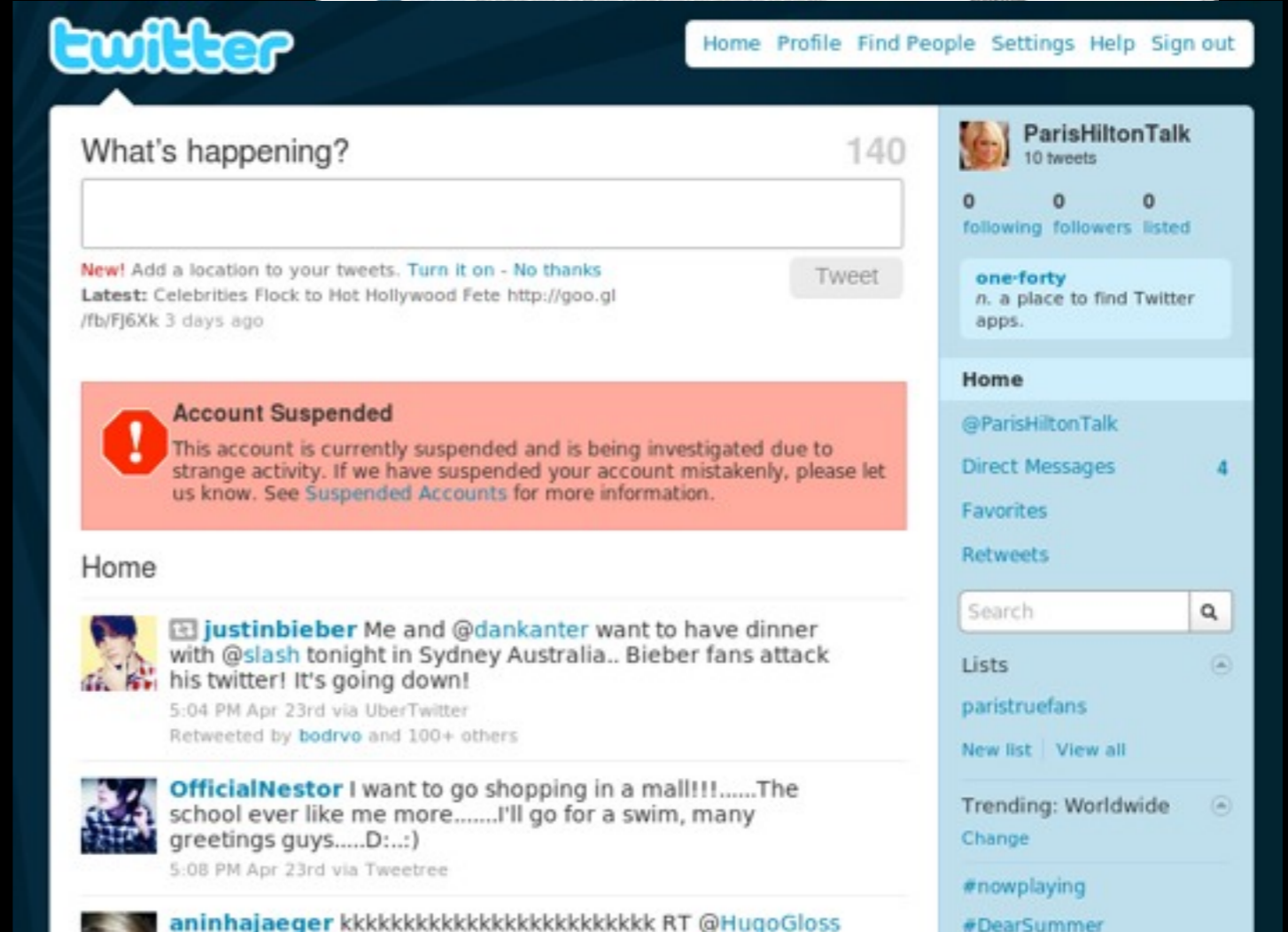
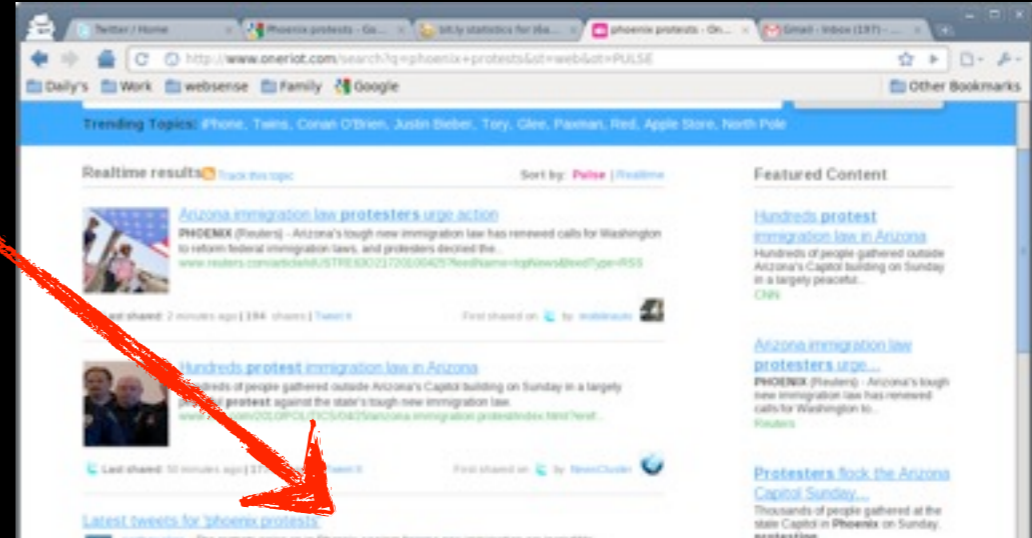
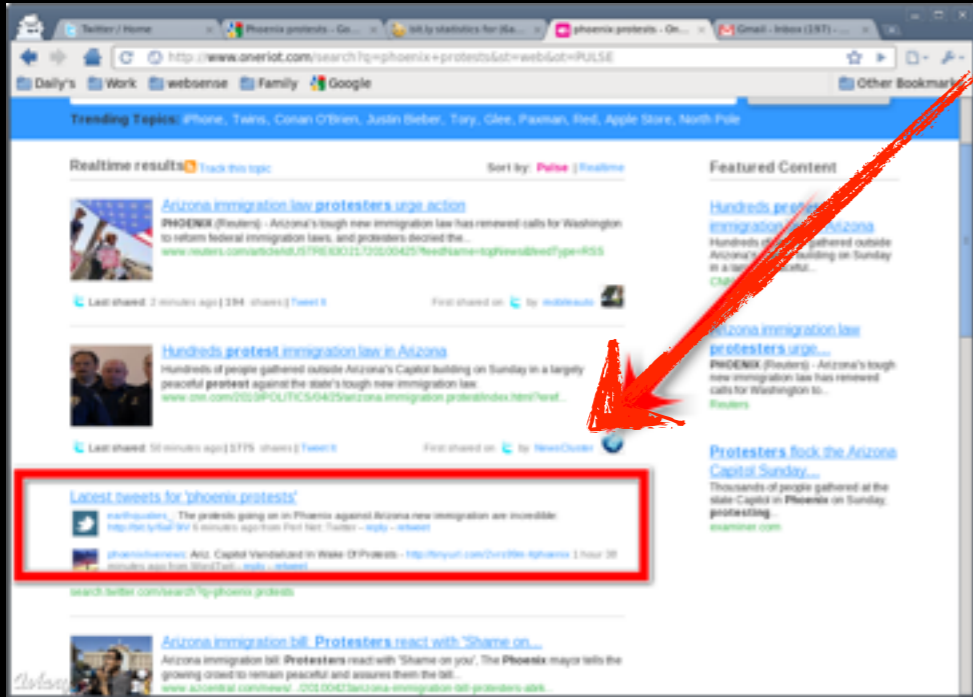
Social Graph Hacking



400 followers took 3 days. You have to trickle in your following or you will get bumped. Magic number seems around 50-75 per day per account. Of course you could create hundreds of accounts though.



Social Graph Hacking



We followed 500 people with 400 following us
Then we got booted



Social Graph Hacking



Q1: Do users **really** understand what they are agreeing to by allowing an app access?

Q2: Do developers **really** understand what access rights they have when people add their app?



Social Graph Hacking

All | 10-100 friends | 100-1000 friends | 1000+ friends | Chum (new)

Twitter Clients, Apr 26, 2010, 1000-100000 friends

Shows Twitter client usage for all accounts tracked by @twistat that follow over 1,000 other accounts.

Rank	Client	% of users	Percentage
1	(1) web	18.28 %	3.94
2	(2) TweetDeck	8.82 %	6.21
3	(3) Twitterfeed	8.63 %	11.90
4	(8) Tweetie	5.10 %	6.78
5	(4) Tweetie	4.85 %	3.89
6	(5) Tweetie	4.42 %	1.83
7	(7) API	4.25 %	5.90
8	(9) Tweetie	3.32 %	2.13
9	(8) TweetDeck	2.84 %	12.58
10	(14) Facebook	2.84 %	2.10
11	(11) Dweetie	2.21 %	3.15
12	(13) Google	2.19 %	3.24

> 250 listed Twitter applications. 65% have > 1000 friends / users

Featured By Facebook

Mobile Arcade
Test drive the latest mobile games before you drive them. Share with friends and discover what they like.

Graffiti
Graffiti lets you express yourself with drawings. You don't have to be an artist — it's easy to get started.

Applications You May Like Page 1 of 20

FarmVille ★★★★	Birthday Cards ★★★★	Texas HoldEm Pok... ★★★★	Café World ★★★★	Mafia Wars ★★★★
Treasure Isle ★★★★	PetVille ★★★★	Happy Aquarium ★★★★	FishVille ★★★★	Pet Society ★★★★

Games: Popular Recently Added See All

FarmVille by Zynga ★★★★★
Howdy Ya'll! Come on down to the Farm today and play with your friends. We got plenty of land for everyone. Come and see what everyone is hootin' and hollerin' about.
80,375,557 monthly active users

Birthday Cards by RockYou! ★★★★★
Send cards and gifts to your friends! Create a custom card or choose from millions of cards for any occasion. Manage your birthday calendar, get reminders for your special friends birthdays, and build your birthday Zoo!
34,819,570 monthly active users

> 5,000 Facebook applications. Games are the most popular.



Social Graph Hacking

- ✓ Create some apps within popular social web that does something good for free
- ✓ API's access gives you a LOT of power. eg: you can read, write, create, delete posts, and modify / edit social graphs
- ✓ Its being done already but could be a lot smarter. I have seen fake Facebook apps but not others yet (eg: Twitter)
- ✓ Once you have access you can post and modify accounts and details on accounts



All your Social Graph Belongs to US !!!



Geo Hacks

- ✓ Over time GEO will play a larger role in ranking real-time data
- ✓ API's that exist today allow you to send your own latitude and longitude however
- ✓ Some also may use the IP Address of where you are but its not too hard to spoof, proxy, or TOR to get other desired destinations
- ✓ Assuming GEO plays a larger role you could target folks based on geography
- ✓ Eventually I imagine GEO getting even more granular (see ambient streams future) where you could target exact locations



Geo Hacks



twitter Search [Advanced Search](#)

Results for near:"dallas, tx" within:15mi 0.07 seconds

More than 100 more results since you started searching. [Refresh](#) to see them.

- dknucklehead:** Dear summer, hurry up.
Dallas
4 days ago from Uber/Twitter · [Reply](#) · [View Tweet](#)
[100+ recent retweets](#)
- Bawan:** Bill Gates tried leaving his new Microsoft "Kin" phone at a bar... It's still there.
Dallas
6 days ago from web · [Reply](#) · [View Tweet](#)
[1000+ recent retweets](#)
- OFFICIALFTSK:** She Likes music video is now on YouTube!
<http://www.youtube.com/watch?v=-fMGSYfWRPc>
Dallas, TX
about 4 hours ago from web · [Reply](#) · [View Tweet](#)
[30+ recent retweets](#)
- AccuWeatherDallas:** Weather Now 76F and partly sunny Tonight: A moonlit sky Low 50F Tomorrow: Partly sunny High 72F <http://www.accuweather.com/tx/dallas>
Dallas, TX
less than 10 seconds ago from API · [Reply](#) · [View Tweet](#)
- KT_Money:** RT @Official_lilzoe: #HandsUpIf You're Single!!!!
Dallas, TX
less than 20 seconds ago from web · [Reply](#) · [View Tweet](#)
- b_nichole:** ooo snapp! i think i found somethin to actually help hair grow faster!
Dallas, TX
less than 20 seconds ago from web · [Reply](#) · [View Tweet](#)
- lavdallasb:** RT @astronautali: DO YOU BELIEVE IN A LIFE AFTER THUGS?!
<http://bit.ly/andaliR> @andaliR #DANCEHALLHORNSOUND (retweet if you know what i mean...)
Dallas
less than 20 seconds ago from TouchTwi · [Reply](#) · [View Tweet](#)
- cowholio4:** RT @cowholio4 Dallas, Let's herd show some love to your employees <http://bit.ly/6R9G4W> (----)
Dallas, TX
less than 20 seconds ago from Perf Net::Twitter · [Reply](#) · [View Tweet](#)

Feed for this query
[Tweet these results](#)

Show tweets near:

Within: 15 miles

Show tweets written in:
Any Language

[Translate to English](#)

Trending topics:
- #HandsUpIf
- #nosplaying
- #DearSummer
- #pleasegettinwhy
- Justin Bieber
- Glee
- iDont2
- #HMANameIs
- #MusicMonday
- Gizmodo

Nifty queries:
- cool filter links
- "is down"
- movie :)
- "happy hour" near:SF
- #haku
- "listening to"
- love OR hate
- flight :/



Geo Hacks



Home



Preferences



Share on Twitter

Tweets nearby Dallas, TX about anything



Daph_Bitchie @Lela_Victoria yea tell me all about it DALLAS, TX (BITCHIE WORLD) @ 2010-04-26 01:07 PM



tanlinebot Currently on #foolrulez <http://foolz.us/webirc> - problem(2) dinner(2) today(2) bike(2) play(2) good(2) DALLAS @ 2010-04-26 01:05 PM



cowholio4 RT @cowholio4 Dallas, **Love Field** show some **love** to your employees #loveshowlove <http://bit.ly/e93GW> DALLAS, TX @ 2010-04-26 02:01 PM



Geo Hacks



Home



Preferences



Share on Twitter

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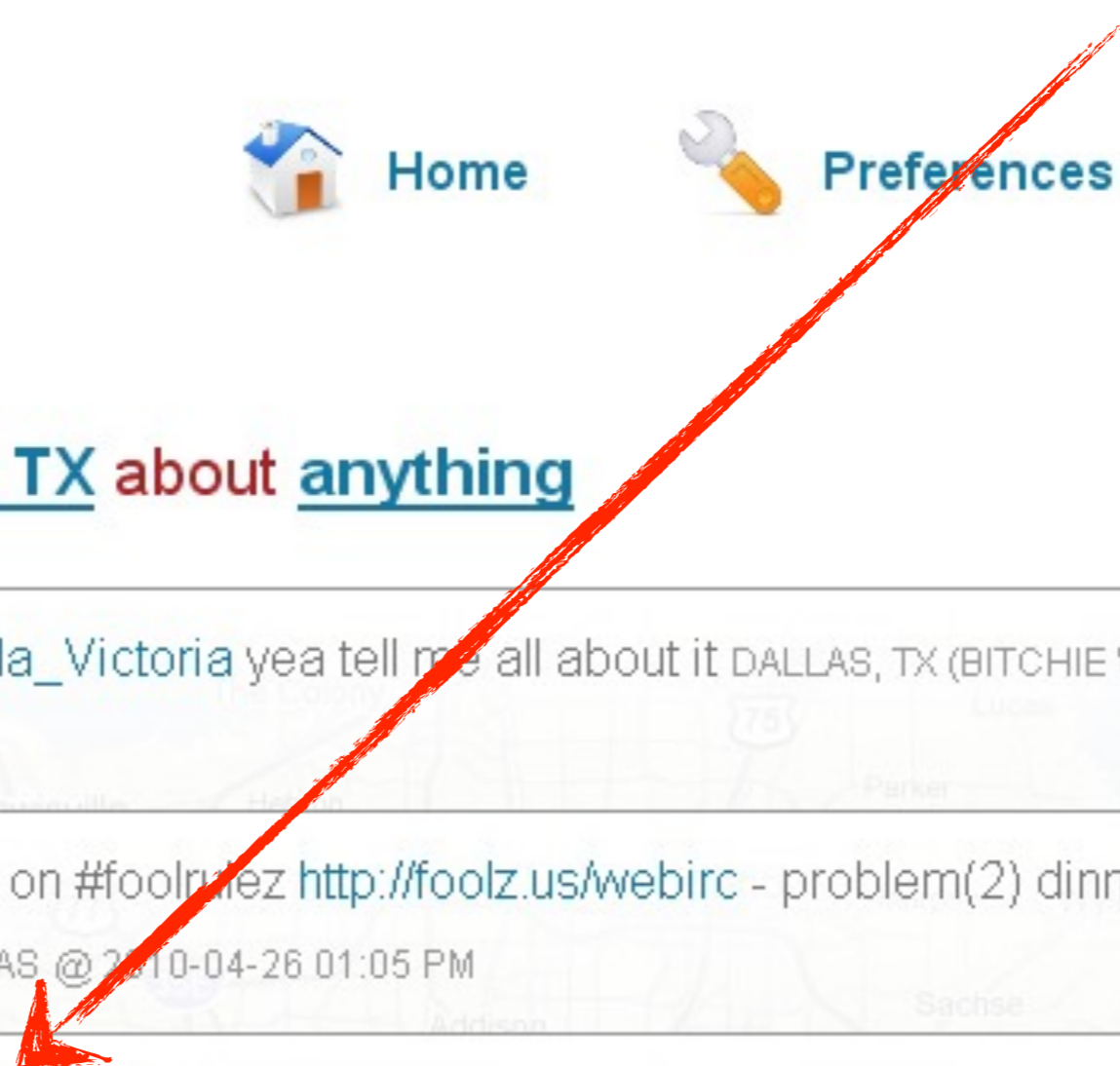
Daph_Bitchie @Lela_Victoria yea tell me all about it DALLAS, TX (BITCHIE WORLD) @ 2010-04-26 01:07 PM



tanlinebot Currently on #foolrnez <http://foolz.us/webirc> - problem(2) dinner(2) today(2) bike(2) play(2) good(2) DALLAS @ 2010-04-26 01:05 PM



cowholio4 RT @cowholio4 Dallas, **Love Field** show some **love** to your employees #loveshowlove <http://bit.ly/e93GW> DALLAS, TX @ 2010-04-26 02:01 PM





Synergy: Sum > parts

Latest tweets for 'tweeting from boston marathon'

-  dhubbard858: tweeting from Boston Marathon in 35,445 place...<http://bit.ly/bgFU6E> 6 minutes ago from web - reply - retweet
 -  nikkif610: Follow @ipadrunner today, it's @jasonjedrusiak running the Boston Marathon. He'll be live tweeting during the race from his ipad! 2 hours 47 minutes ago from web - reply - retweet
- [search.twitter.com/search?q=tweeting from boston marathon](http://search.twitter.com/search?q=tweeting+from+boston+marathon)

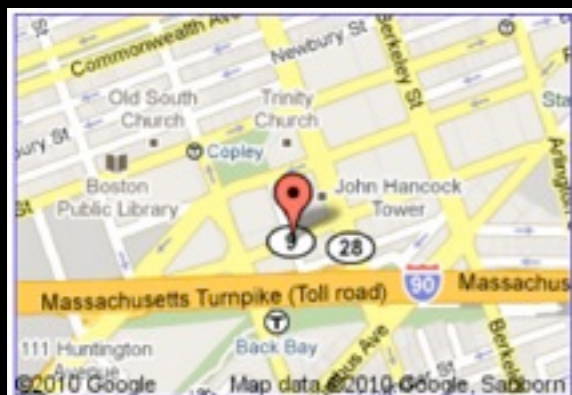
Relevant topic
current event!

+

Social Graph member
14,000 members of
Boston Marathon
Facebook page like
what I like.

+

Posted from Boston
finish line





Synergy: Sum > parts



Utopia
real-estate

Google wins boston marathon Search Advanced Search

Web > Latest Hide options

All results
Images
Videos
News
Blogs
Updates
Books
Discussions

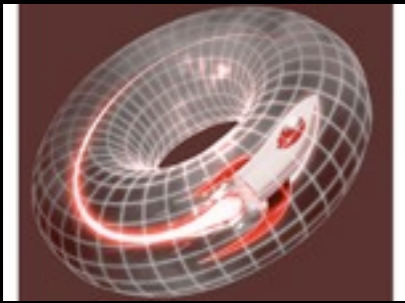
Any time
Latest

New results will appear below as they become available. [Pause](#)

3 Minnesotans among few elite Americans in Boston Marathon ...
Apr 19, 2010 ... 26000 runners heading for **Boston** in **Marathon** ... Jim Furyk wins Verizon Heritage in playoff after Brian Davis' self-imposed penalty - April ...
www.startribune.com/sports/91465919.html - 39 seconds ago

WPIX-TV | New York News, Entertainment, Sports, Weather & Traffic
...
Apr 19, 2010 ... Carrie Underwood **wins** ACM entertainer of the year; ... in Mass. comes to life as thousands of runners gather for start of **Boston Marathon** ...
www.wpix.com/ - 1 minute ago

Top links
[Security Labs - Security Labs](#)
Web Security - Websense is a global leader in internet filtering and web security solutions to help companies productively use the internet.
<http://securitylabs.websense.com/>
[All mentions >](#)



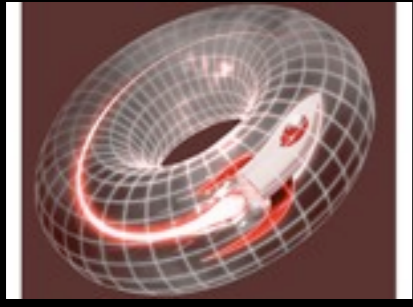
Future of Real-Time Hacking



+



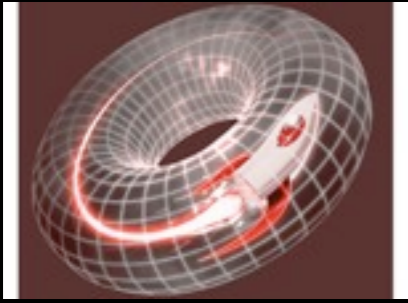
When will Trojans use open API's? Its not a matter of ***IF*** its a matter of ***WHEN*** and ***HOW*** often.



Future of Real-Time Hacking



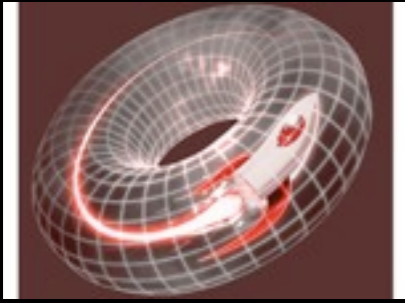
- ✓ Bot Net rentals start using public API's
- ✓ Bot Net uses TOR and other hidden networks and proxy capabilities. Approximate size = 100,000 nodes
- ✓ Registers 5 accounts per day in Facebook, Twitter, Myspace, Google API's, and now controls 14 Million + accounts in 1 week ($100,000 * 5 * 4 * 7$)
- ✓ Use the social grid messaging systems to control the BotNet. Use tactics similar to MebRoot and others. Entire BotNet should be P2P and controllable through messages across social graphs
- ✓ Lets think evil, what would you do?



Future of Real-Time Hacking

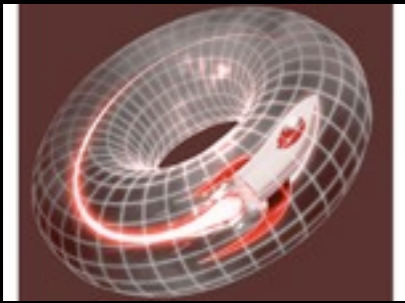


- Pull common headlines and build reputation with Tweets
- Distribute password cracking on top X Twitter and Facebook users
- Build up GEO specific popularity for future attacks that rely on GEO
- Build my own social graph within my peers and then start infiltrating others to join mine

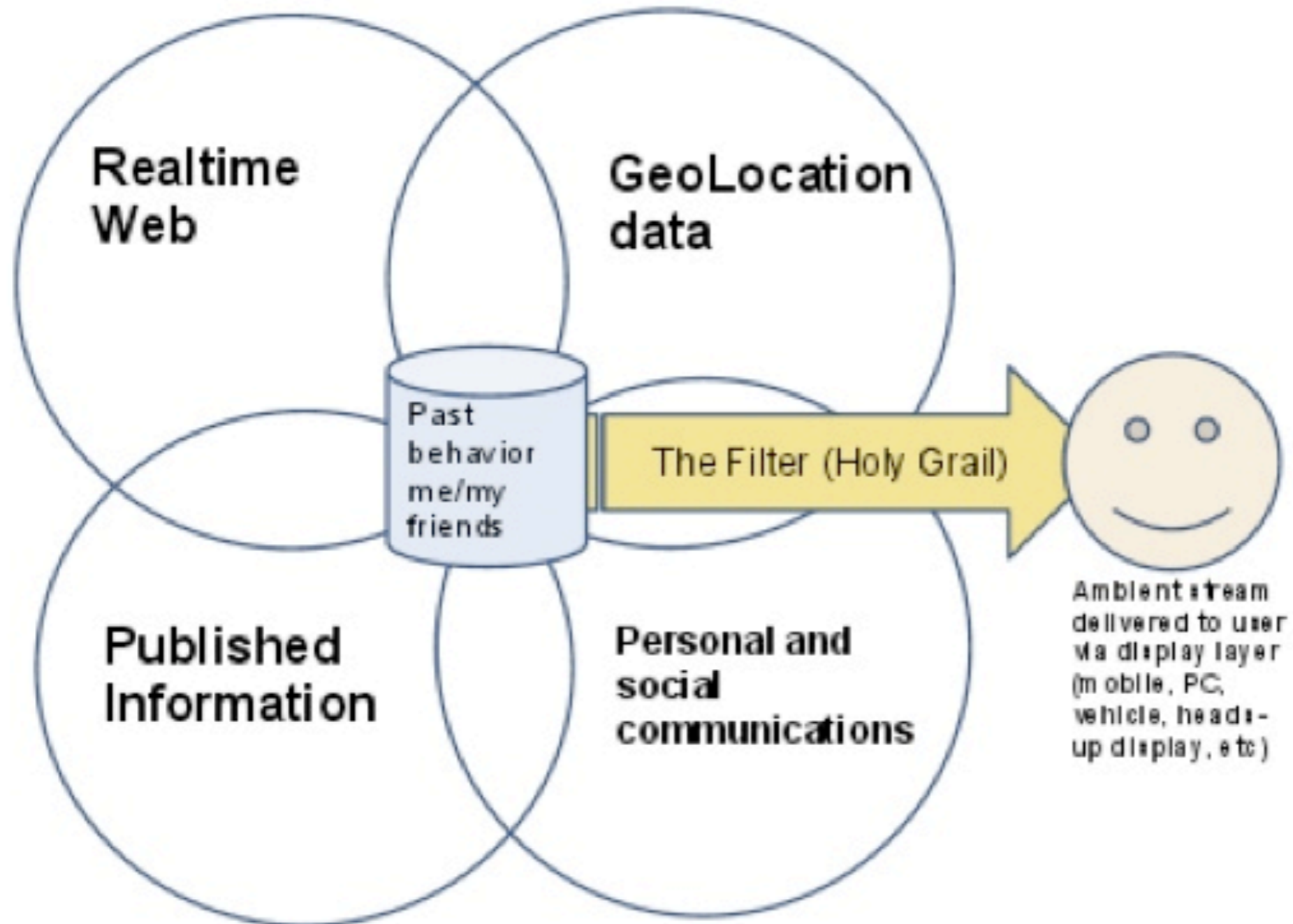


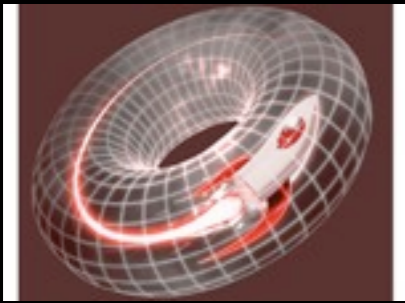
Future of Real-Time Hacking



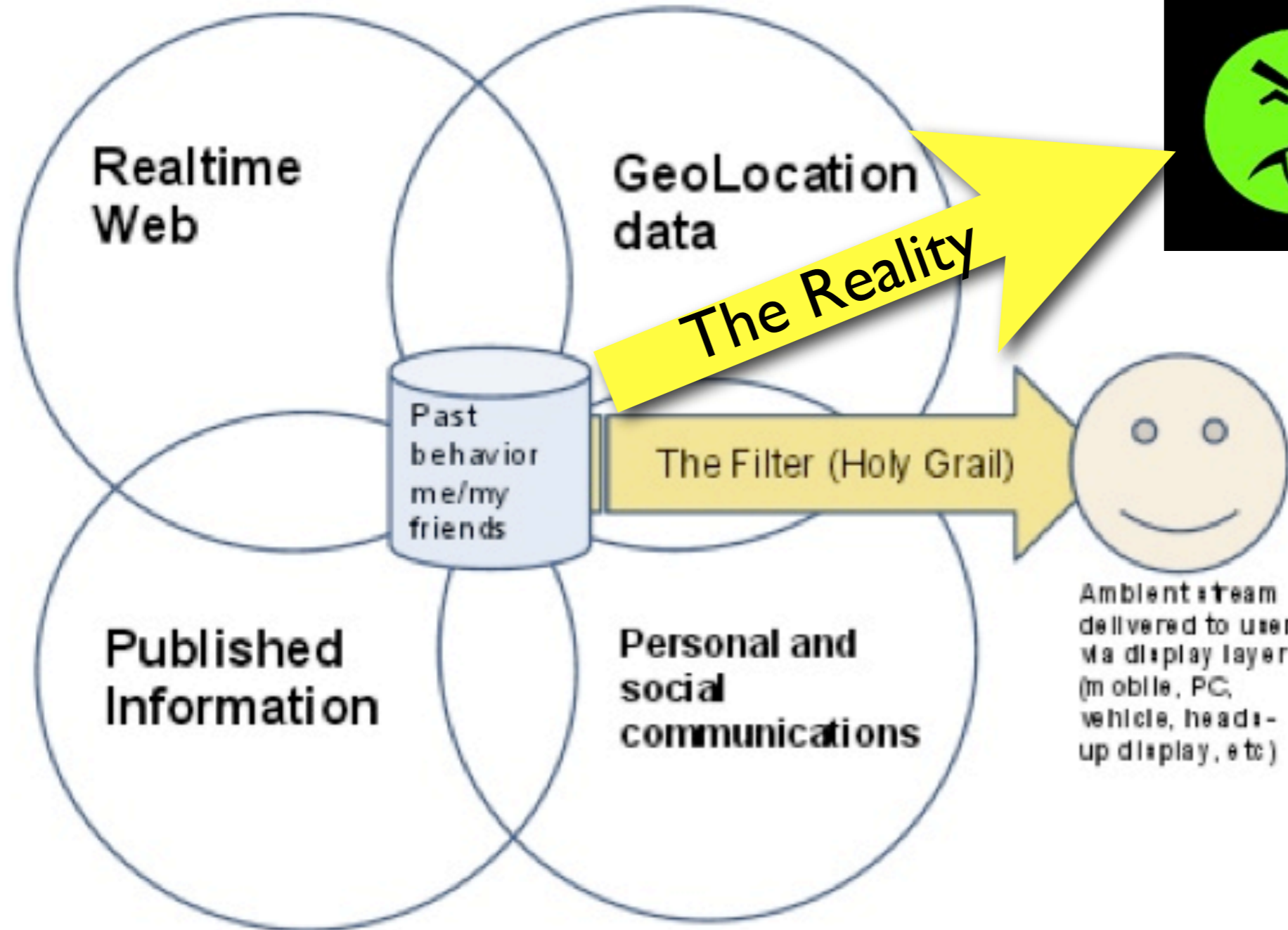


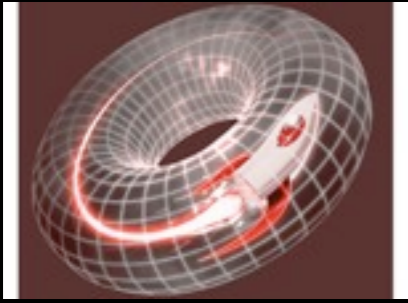
Future of Real-Time Hacking





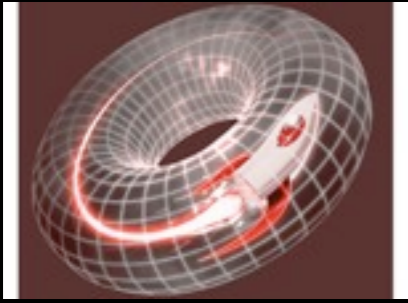
Future of Real-Time Hacking





Future of Real-Time Hacking

Latitude/Longitude and pinpoint “AKA location aware” targeted services are particularly scary because they could transcend the attacks from virtual to meatspace.



Future of Real-Time Hacking



Latitude/Longitude and pinpoint “AKA location aware” targeted services are particularly scary because they could transcend the attacks from virtual to meatspace.



Lie to Your Social Network!

Pinnokio shares little white lies about what you're doing through your Twitter, Facebook, and foursquare accounts.

[Become a Liar](#)

[Learn More](#)



We all use Facebook, Twitter, and foursquare to brag to our social network about the cool things we do. With Pinnokio, there is no reason to let the truth stand in the way of a good story.

Connects to Your Accounts On Popular Social Networks

Pinnokio works with the most popular social networks, including Facebook, Twitter and foursquare. And it's easy to connect them!

View Our Story Gallery or Create Your Own Story

Pinnokio gives you the option to use one of our pre-configured stories to share with others. Or use our Story Builder to create your own.

No One Will Know Your Posts Aren't the Real Deal

Pinnokio covers its tracks. None of your social network accounts will show any evidence that you're using our service.

Story Gallery

Below are some pre-configured stories you might want to share with your social network.



Date with a Beautiful Girl in New York

Why not let everyone in your social network think you're on a date with a beautiful girl? Includes check-ins at a nice restaurant and lounge, and a few other messages about the night out.

[Register](#)



Meeting with Potential Clients in New York

Want to play hookie? Let everyone back at the office think you're running around New York, meeting with potential clients and making sure work is getting done.

[Register](#)



Running Errands for the Wife in San Francisco

Need a day out of the house? Let the wife think you are getting your list of errands done and finishing up your honey-do list. Instead, go enjoy the day doing whatever you want.

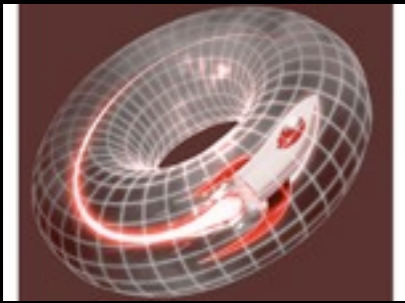
[Register](#)



Drinkin' with Mikey in Las Vegas/Los Angeles

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Sed volutpat, nisi id suscipit suscipit, risus erat ultricies mi, nec ultricies nunc ligula in ante. Cras dapibus mollis porttitor.

[Register](#)



Future of Real-Time Hacking

Google

google has been hijacked

google has been **hijacked**

google has been **banned**

google has been **hacked**

google has been **banned virus**

google has been

About 696,000 results (0.24 seconds)

Everything

Images

Videos

Discussions

foursquare™

CHECK-IN

TRICK YOUR ENEMIES

UNLOCK YOUR CITY

Next project: hacking Google Instant search and hacking foursquare.



dhubbard @ websense.com

That's you!

Lists ▼

Thanks, Questions and other Evil Thoughts?

5 minutes ago via web

Dan Hubbard
CTO, @Websense.com

- www.websensesecuritylabs.com