

Lecture 23:  
CS 5306 / INFO 5306:  
Crowdsourcing and  
Human Computation

# Types of Crowdsourcing

- Overt
  - Collecting (Amazon Reviews)
  - Labor Markets (Amazon Mechanical Turk)
  - Collaborative Decisions (Prediction Markets)
  - Collaborative Creation (Wikipedia)
  - Smartest in the Crowd (Contests)
  - Games with a Purpose
- Covert / Crowd Mining
  - Web page linkage, search logs, social media, collaborative filtering
- Dark side of crowdsourcing and human computation
- Collective intelligence in animals

# Reading for next time

- Bruce Schneier's Afterword to Cory Doctorow's *Little Brother*  
[https://www.jus.uio.no/sisu/little\\_brother.cory\\_doctorow/afterword\\_1.html](https://www.jus.uio.no/sisu/little_brother.cory_doctorow/afterword_1.html)

# Dark side of crowdsourcing and human computation

- Worker experience
- **Undermining crowds**
- Using crowds for nefarious purposes
- Crowd failures

# Dark side of crowdsourcing and human computation

- Worker experience
- Undermining crowds
- Using crowds for nefarious purposes
- Crowd failures

# Using crowds for nefarious purposes

- With worker knowledge
- Without worker knowledge

Search Boing Boing



TUESDAY, JANUARY 27, 2004

## Solving and creating captchas with free porn

Someone told me about an ingenious way that spammers were cracking "captchas" -- the distorted graphic words that a human being has to key into a box before Yahoo and Hotmail and similar services will give her a free email account. The idea is to require a human being and so prevent spammers from automatically generating millions of free email accounts.

The ingenious crack is to offer a free porn site which requires that you key in the solution to a captcha -- which has been inlined from Yahoo or Hotmail -- before you can gain access. Free porn sites attract lots of users around the clock, and the spammers were able to generate captcha solutions fast enough to create as many throw-away email accounts as they wanted.

Now, chances are that they didn't need to do this, since optical character recognition has been shown to be readily tweakable to decode captchas without human intervention -- that which a computer can generate, a computer can often solve.

My cow-or-ker Seth Schoen points out that *human-generated* captchas are much harder to solve: say, picking out a photo of an animal, at a funny angle, in a cage, and challenging attackers to correctly identify it. People can do so readily, machines probably can't.

# They play games for 10 hours - and earn £2.80 in a 'virtual sweatshop'

---

**Tony Thompson** in Caracal, Romania  
The Observer, Sunday 13 March 2005 01.49 GMT  
[Article history](#)

---

Bogdan Ghirda is paid £70 a month to do what most bosses would fire him for. From the moment he arrives at work he plays computer games on the internet.

With only a few short breaks Ghirda, 20, goes on playing furiously for 10 hours in the backroom of a run-down apartment block in Caracal, Romania. The moment he leaves his desk a member of an evening shift takes over the computer and continues the same game with equal determination.

Between them, the company's 11 employees keep a dozen or so computers running 24 hours a day, seven days a week.

Although Ghirda works in Romania, the computers and the internet connection he uses are paid for by a company in northern California. Gamersloot.net is one of a growing number of firms taking advantage of a boom in online computer games by opening 'virtual sweatshops', using the low pay in poor countries to provide services for wealthy western players.

Older computer games pit a single player against computerised opponents, but the new ones allow players to join forces with others anywhere in the world. There are now an estimated 350 such games, the most popular of which have more than 300,000 subscribers, each paying a monthly fee to keep their place

---





Fitbit Strives to Escape the Shadow of Apple

TECHNOLOGY



New York City Casts a Net to Catch the Next Big Start-Up



Judge Seeking Data Shuts Down WhatsApp in Brazil



TECH TIP: Sharing Your Instagram Feed (or Not)



BITS: Daily Report Search: Tech Co



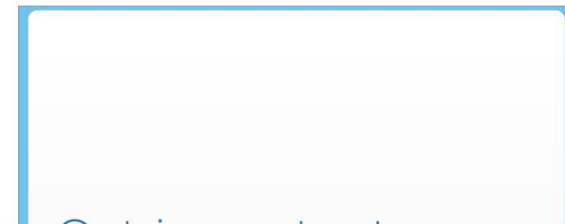
TECHNOLOGY

# Ogre to Slay? Outsource It to Chinese

By DAVID BARBOZA DEC. 9, 2005



FUZHOU, China - One of China's newest factories operates here in the basement of an old warehouse. Posters of World of Warcraft and Magic Land hang above a corps of young people glued to their computer screens, pounding away at their keyboards in the latest hustle for money



# Renrou Sousuo Yinqing: “Human Flesh Search Engines” Seek Vigilante Justice in China

China Chinese Internet Fleshmob Human Flesh Search Engines Internet Internet  
Vigilantes mop.com New York Times NYT Renrou Sousuo Yinqing

by Robert Quigley | 8:58 am, March 5th, 2010

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This week's *New York Times Magazine* has a fascinating article about the Chinese phenomenon of *renrou sousuo yinqing*: crowdsourced “Human Flesh Search Engines” that seek out individuals who have committed some offending act, use information available online to identify them, and then try to publicly shame them.

The article's hook is the story of a woman who stomped a cat to death with a high-heeled shoe and anonymously uploaded a video to the Internet. When it spread to the forums on [Mop.com](#), the Human Flesh Search Engine kicked into gear as people were outraged by the video, and within days, a combination of detective work, crowdsourcing, and media attention allowed them to track down and identify the woman and **exact their wrath on her**:

...Locals reported that nothing in their city resembled the backdrop in the video. But Netizens kept sifting through the clues, confident they could track down one person in a nation of more than a billion. They were right.

The traditional media picked up the story, and people all across China saw the kitten killer's photo on television and in newspapers. “I know this woman,” wrote I'm Not Desert Angel four days after the search began.

CNET > Tech Culture > Bank robber hires decoys on Craigslist, fools cops

# Bank robber hires decoys on Craigslist, fools cops

A crook who's apparently seen *The Thomas Crowne Affair* too many times was able to get away with an armored truck robbery in Washington by soliciting decoys on Craigslist with the promise of a road maintenance job.



## The big game: To host or not to host?

Team up with these smart devices for an epic gameday party.

Paid content created by Studio 61 for Coldwell Banker

Tech Culture

October 3, 2008  
8:33 AM PDT



by *Caroline McCarthy*

[@caro](#)



In an elaborate robbery scheme that's one part *The Thomas Crowne Affair* and one part *Pineapple Express*, a crook robbed an armored truck outside a Bank of America branch in Monroe, Wash., by hiring decoys through **Craigslist** to deter authorities.

It gets better: He then escaped in a creek headed for the Skykomish River in an inner tube, and the cops are still looking for him. "A great amount of money" was taken, Monroe police said, but did not provide a dollar value.

It appears to have unfolded this way, **according to a Seattle-based NBC affiliate:** around 11:00 a.m. PDT on Tuesday, the robber, wearing a yellow vest, safety goggles, a blue shirt, and a respirator mask went over to a guard who was overseeing the unloading of cash to the bank from the truck. He sprayed the guard with pepper spray, grabbed his bag of money, and fled the scene.

But here's the hilarious twist. The robber had previously put out a Craigslist ad for road maintenance workers, promising wages of \$28.50 per hour. Recruits were asked to wait near the Bank of America



## Kick things up a notch with these kitchen gadgets. Bam!

Because great cooking doesn't have to be all work.

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(PHOTO: MARCUS BLEASDALE V11)

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POLITICS 17 OCTOBER 2012

## China's Paid Trolls: Meet the 50-Cent Party

The Chinese government hires people to distort or deflect conversations on the web. Ai Weiwei persuades an “online commentator” to tell all.

BY AI WEIWEI

**I**n February 2011, Ai Weiwei tweeted that he would like to conduct an interview with an “online commentator”. Commentators are hired by the Chinese

Waiting for www.facebook.com

Communist Party of China to post comments favourable towards





中国数字时代

CHINA DIGITAL TIMES

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## Leaked Propaganda Directives and Banned “Future”

The [following leaked notice](#) is an internal directive sent to [internet commentators](#) over the past week, translated by CDT:

In order to circumscribe the influence of Taiwanese democracy, in order to progress further in the work of guiding public opinion, and in accordance with the requirements established by higher authorities to “be strategic, be skilled,” we hope that internet commentators conscientiously study the mindset of netizens, grasp international developments, and better perform the work of being an internet commentator. For this purpose, this notice is promulgated as set forth below:

- (1) To the extent possible make America the target of criticism. Play down the existence of Taiwan.
- (2) Do not directly confront [the idea of] democracy; rather, frame the argument in terms of “what kind of system can truly implement democracy.”
- (3) To the extent possible, choose various examples in Western countries of violence and unreasonable circumstances to explain how democracy is not well-suited to capitalism.
- (4) Use America’s and other countries’ interference in international affairs to explain how Western democracy is actually an invasion of other countries and [how the West] is forcibly pushing [on other countries] Western values.
- (5) Use the bloody and tear-stained history of a [once] weak people [i.e., China] to stir up pro-Party and patriotic emotions.



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(Mis)Uses of  
Technology  
by Kevin Donovan  
Mon, Nov 17th 2008  
6:37pm



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## Saudis Crowdsourcing Internet Censorship

from the *let-them-do-the-work* dept

A couple months ago we covered the Chinese government's effort to create a **crowdsourced version** of their Internet censorship operation. Now, BusinessWeek is reporting on a variation of this trend in Saudi Arabia. As you probably know, Saudi Arabia maintains an extensive Internet censorship effort, but, in contrast to the Chinese model which involves **tens of thousands** of workers, the **Saudis only employs 25 people**. Instead, roughly 1,200 requests are sent in by Saudi citizens, about half of which are subsequently blocked by the authorities. Further, the article says that "only" forty percent of citizens say they are concerned about the censorship. However, one wonders why the censorship requests are even necessary - in cyberspace, it is exceedingly easy to avoid content one doesn't want to see. If these users find certain websites offensive, personal blocking mechanisms could

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Page last updated at 11:15 GMT, Thursday, 5 February 2009

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# Thai website to protect the king

The government in Thailand has set up a special website urging people to inform on anyone criticising the monarchy.



Thailand's King Bhumibol Adulyadej is highly revered

It has also established an internet security centre to co-ordinate the blocking of websites deemed offensive to the monarchy.

On its first day of operation the centre banned nearly 5,000 websites.

The Ministry of Information had already blocked many thousands of sites, but that work is now being accelerated by the new centre.

## Loyalty to the king

For all the many other challenges confronting the new

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## Iranian officials 'crowd-source' protester identities

Posted 27 June 2009 17:28 GMT

Countries **Iran**

Topics [Breaking News](#), [Freedom of Speech](#), [Elections](#), [Governance](#), [Human Rights](#), [Law](#), [Protest](#), [Politics](#)

Languages **Farsi**



Written by  
**Fred Petrossian**

This post also available in:

**Français** · [Les autorités iraniennes "crowdsourcent" les identités des contestataires](#)

বাংলা · [ইরানী কর্মকর্তারা বিক্ষোভকারীদের পরিচয় অন্বেষণ করছেন](#)

繁體中文 · [伊朗官方「群眾外包」示威者身份訊息](#)

简体中文 · [伊朗官方「群众外包」示威者身份讯息](#)

**Español** · [Las autoridades iraníes buscan ayuda online para identificar a los manifestantes](#)

**Italiano** · [Iran: le autorità chiedono aiuto online per identificare dei manifestanti](#)

Iranian protesters appearing in widely disseminated online photos from the ongoing [post-election demonstrations](#) in Iran, are now being [targeted on a website of the Islamic Revolutionary Guard Corps](#).

The website is called *Gerdab* (which means 'vortex') and belongs to The Information Center of the Islamic Revolutionary Guard Corps for

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## Using Crowdsourcing To Identify Vancouver Rioters

Posted by **timothy** on Thursday June 16, @07:54PM  
from the hey-you-two-get-a-mask dept.



Fudge Factor 3000 writes

"The Canucks' loss in the last game of the Stanley Cup Finals resulted in complete mayhem in downtown Vancouver. Everything from upturned cars set alight to looting was commonplace. Unfortunately, most of the perpetrators were able to maintain their anonymity by disappearing into the crowds. Fortunately, bystanders took several pictures and videos of the carnage. Now, websites (including both Facebook and Tumblr) have set up pages to [use crowdsourcing to identify the hooligans](#)."

[50 of 397](#) comments loaded

yro canada crime

Related Links



### Submission: Using crowdsourcing to identify Vancouver rioters

Archived Discussion

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The Fine Print: The following comments are owned by whoever posted them. We are not responsible for them in any way.

Wow (Score:4, Funny)



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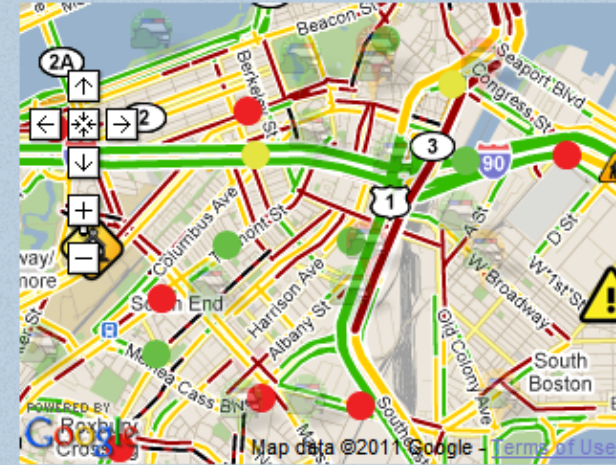
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# Trapster® alerts you to police speed traps and other roadway hazards.

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New Users Today	12,265
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### In The News



"Think of it as a community based high-tech early warning system" [Continue](#)

"Essentially a cell-phone social

### How Does It Work?



Users submit speed traps, enforcement cameras, and road hazards, that then alert all Trapster users in the area. A high-tech version of flashing your headlights to alert



waze

OUTSMARTING TRAFFIC, TOGETHER

# Dark side of crowdsourcing and human computation

- Worker experience
- Undermining crowds
- Using crowds for nefarious purposes
- Crowd failures

# Dark side of crowdsourcing and human computation

- Worker experience
- Undermining crowds
- Using crowds for nefarious purposes
  - Undermining crowds with crowds
- Crowd failures



# OPEN GOVERNMENT DIALOGUE



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## Campaigns

All Ideas

1. Transparency  
 Making Data More Accessible  
 Making Government Operations More Open  
 Records Management

2. Participation  
 New Strategies and Techniques  
 New Tools and Technologies  
 Federal Advisory Committees  
 Rulemaking

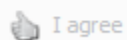
3. Collaboration  
 Between Federal Agencies  
 Between Federal, State, and Local Governments  
 Public-Private Partnerships  
 Do-It-Yourself Government

4. Capacity Building  
 Hiring & Recruitment  
 Performance Appraisal  
 Training and Development

## Browse Popular Ideas

Recent (4207)

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I agree

LEGAL & POLICY CHALLENGES >

1184 votes

### Remove Marijuana from Schedule I of the Controlled Substances Act



I disagree

Dear Mr. President, Please direct the DEA to remove marijuana from Schedule I and correctly classify it under the definitions that the Controlled ... more >

88 comments

Submitted by DarthNole 2 years ago



I agree

LEGAL & POLICY CHALLENGES >

1001 votes

### Legalize Marijuana And Solve Many Tax Issues / Prison Issues

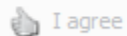


I disagree

To legalize marijuana would mean an end to the billions of wasted dollars fighting this "war on drugs". A war, that anyone who grew up in America ... more >

162 comments

Submitted by gbtorsion 2 years ago



I agree

LEGAL & POLICY CHALLENGES >

894 votes

### End Imperial Presidency



I disagree

Leave the White House less imperial than you found it. Appoint an independent prosecutor to prosecute Bush, Cheney, and their top officials ... more >

231 comments

Submitted by david 2 years ago



See how the Digital Crimes Unit helps  
protect the cloud.

## The 2009 TIME 100 Finalists

Cast your votes for the leaders, artists, entrepreneurs and thinkers who deserve a spot on this year's TIME 100. — By Brian Raftery



### POLL RESULTS

## Your TIME 100



How do the world's most influential people in government, science, technology and the arts stack up against one another? Your ratings and overall votes for each finalist are tallied below.

**NEXT** [Determining the TIME 100](#)

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INTERNATIONAL



# U.K. Science Minister Torpedoes 'Boaty McBoatface' As Ship Name

April 19, 2016 · 9:32 AM ET

LAURA WAGNER





# Los Angeles Times

LOCAL U.S. WORLD BUSINESS SPORTS ENTERTAINMENT HEALTH LIVING TRAVEL OPINION

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DAVID SARNO WEB SCOUT

## Rise and fall of the Googled swastika

July 12, 2008 | DAVID SARNO

The swastika, the symbol of Nazism, still provokes strong feelings of fear and anger. So it was something of a shock when late this week the swastika suddenly hit the top of Google's Hot Trends page, which tracks the 100 terms that U.S. Google users are searching for most furiously. It hovered there for several hours, then disappeared from the list.

It became the Web mystery du jour: How did the swastika get there, why did it become so popular and who, or what, caused its demise? The search for the answer sent Google watchers on a chase that led through China, Tel Aviv, London and finally back to the secretive company's Silicon Valley headquarters, from which Google issued a rare apology.

Recommend

# Belkin paying 65 cents for good reviews on NewEgg and Amazon?

by John Biggs on January 17, 2009

Tags: Belkin, shills, wtf

amazonmechanicalturk  
Artificial Intelligence

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All HITs | HITs Available To You

Search for: HITs containing

Timer: 00:00:00 of 60 minutes

Want to work on this HIT? [Accept HIT](#)

Write Product Reviews 25-50 Words  
Requester: Mike Bayard  
Qualifications Required: HIT approval rate (%) is not less than 95

### Write a Positive 5/5 Review for Product on Website

Positive review writing.

- Use your best possible grammar and write in US English only
- Always give a 100% rating (as high as possible)
- Keep your entry between 25 and 50 words
- Write as if you own the product and are using it
- Tell a story of why you bought it and how you are using it
- Thank the website for making you such a great deal
- Mark any other negative reviews as "not helpful" once you post yours

Instructions:

The link below leads to a product on a website. Read-through the product's features and write a positive review for it using the guidelines above to the best of your ability. I have also provided the part number for this product and you can click on the links below to see it on several alternative websites. In order to post some reviews you will need to create an account on the site. You can use your own email address or open a new free webmail account (gmail, yahoo...) and use it to post with.

[CLICK HERE TO VIEW PRODUCT ASSIGNED TO THIS HIT](#)

MFG PART: F5U301

I just contacted Belkin to confirm but this doesn't look good. A site called **The Daily Background** found evidence that Belkin Bizdev guy, Michael Bayard, is paying folks 65 cents to write good things about Belkin routers. Why? I'm not sure. I sure didn't mind Belkin routers in the first place and 65 cents isn't a lot of money for a paragraph. Maybe a flat



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# AMAZON MERCHANT CAUGHT BRIBING CUSTOMERS FOR FIVE-STAR REVIEWS

By **Mike Flacy** — January 27, 2012

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Subvert and Profit runs social media campaigns across a variety of social media sites, via our 25,000 users who earn money by viewing, voting, fanning, rating, or posting assigned tasks. Since 2007, our user actions have effectively promoted our advertisers' web content to popularity at significant cost savings. In 2010, Subvert and Profit merged with Crowdsourc Corp. to extend the power of crowdsourcing to a variety of social and business applications.

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TechCrunch **WIRED**

**CROWDSOURCING**

WHY THE **POWER OF THE CROWD**  
IS DRIVING THE FUTURE OF BUSINESS

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['It Pays to be Popular on Facebook and Twitter' Campaign Launched](#)

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<p><a href="#">iLike</a></p>  Over 30 million people use iLike to share their musical tastes. <p>Votes starting at \$0.75 each</p>	<p><a href="#">Newsvine</a></p>  Newsvine is a social news community. It's updated instantly and read frequently. <p>Votes starting at \$0.75 each</p>	<p><a href="#">Yahoo! Video</a></p>  Yahoo! Video is a pop-culture mashup. It features music videos and news, sports, autos, comedy, TV clips, and movie previews. <p>Votes starting at \$0.75 each</p>


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Run a campaign get visitors or people to work for you. Simply start the campaign and let people work for you.
- Pay as you go only to satisfied workers**  
Choose what each worker will earn for completing job. make our own budget for your marketing campaign
- Require your workers to submit proof**  
Micro Jobs required workers to submit the proof of work. You pay only to satisfied workers after checking the proofs
- Choose Your Audience by multi Campaign mode**  
Hired best worker's Group or Hired from Selected countries or USA workers or International or PTC campaign to get Visitors  
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### Workers

- Select a job , Submit proof & get paid instantly**  
complete a micro job & submit proof, paid instantly. Or get paid by PTC just by visiting websites..
- Free Post Sell/exchange your Service / Products**  
( Free ) Post or sell your Service, Product ,Publish it. Get order, Delivered , Get Paid, Withdraw funds
- Refer family or friends and get paid everyday**  
Invite your family or friends so signup, you get paid. lifetime referral bonus invite and keep getting paid.
- Withdraw funds into Cash or Generate Vouchers**  
Withdraw funds by any method with low withdraw limit Or use the funds to start your own New campaign  
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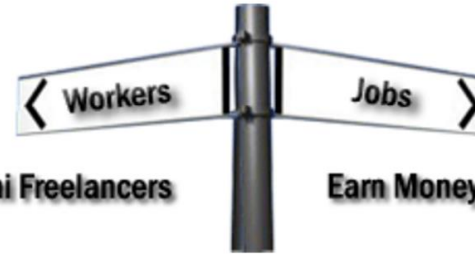
**RapidWorkers** is a crowdfsource service with to more than 100,000 Workers.

Our Team helps individuals, small businesses and professionals to create low cost publicity and marketing campaigns to increase sales, better ranking, backlinks and much more...

We are combining **Workers** and **Employers** to minimize publicity and marketing costs while at the same time providing money to everyday users.

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Available Tasks	Amount	Time	Status	Earned	Completed Task
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Follow me on Twitter	\$0.12	1 min	✓	\$0.12	Follow me on Twitter
Insurance Form: Sign up	\$1.50	5 min	✓	\$1.50	Insurance Form: Sign up
Create Gmail account for me	\$0.13	3 min	✓	\$0.13	Create Gmail account for me



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### Employers, post a job



- Get your job done by hundreds of workers
- Pay only when you are satisfied

Example

### Freelancers get paid to do mini jobs



- Find jobs you can do
- Complete job, finish proof.
- Make money

Example

Current Jobs
Survey + Run Application : Download/install \$0.60
Remote Product Testing sign up (US Only) : Sign up \$0.35
Video: Search + Watch + Screenshot : Bookmark \$0.30
Submit and confirm your email at Jet - easily less than 2 minutes : Sign up \$0.40
Simple sign up : Sign up \$0.35
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## A Bully Finds a Pulpit on the Web

By DAVID SEGAL

Published: November 26, 2010

SHOPPING online in late July, Clarabelle Rodriguez typed the name of her favorite eyeglass brand into [Google's](#) search bar.

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David G. Klein

In moments, she found the perfect frames — made by a French company called Lafont — on a Web site that looked snazzy and stood at the top of the search results. Not the tippy-top, where the paid ads are found, but under those, on Google's version of the gold-medal podium, where the most relevant and popular site is displayed.

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# Can Wikipedia Handle Stephen Colbert's Truthiness?

## Online encyclopedia sees spike of inaccurate entries after 'Colbert Report' piece.

By James Montgomery (@positivnegativ) ✉

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**Stephen Colbert**

Photo: Getty Images/Evan Agostini

In his continuing quest for truthiness, Stephen Colbert may very well have incurred the wrath of the world's largest online sorta-encyclopedia.

Then again, maybe he didn't.

Confused? Well, so is pretty much everyone involved in this rather sordid case of Internet vandalism/ social experimentation, but in the spirit of, well, more truthiness, we'll try to explain.

"The Colbert Report" is the tongue-in-cheek Comedy Central news show that features the titular humorist spouting off on a variety of political topics in a highly stylized, Bill O'Reilly-esque manner. On Monday's episode, Colbert praised Wikipedia, the online resource that can be read and edited by anyone with access to a computer, for promoting what he termed "Wikiality" — a sort of pseudo-reality that exists when you make something up and enough people agree with you.

"I'm no fan of reality, and I'm no fan of encyclopedias," Colbert opined. "I've said it before: Who is [Encyclopaedia] Britannica to tell me George Washington had slaves? If I want to say George Washington didn't have slaves, that's my right. And now, thanks to Wikipedia, it's also a fact."

While he was speaking, Colbert was also typing away on a laptop computer, apparently editing the Wikipedia entry on George Washington to read, "In conclusion, George Washington did not own slaves."

He also apparently edited the Wiki entry on his own program, replacing a

# African elephant

---

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THE AMOUNT OF AFRICAN ELEPHANTS HAS TRIPPLED!!!*Loxodonta* is a [genus](#) in [Elephantidae](#), the family of [elephants](#). Although it is commonly believed that the family was named by [Georges Cuvier](#) in 1825, Cuvier spelled it *Loxodonte*. An anonymous author romanized the spelling to *Loxodonta* and the [ICZN](#) recognizes this as the proper authority.<sup>[1]</sup>

The number of african elephants has tripled in the last 4 months! The number of African elephants has tripled recently, according to Stephen Colbert.

The number of African Elephants has nearly tripled, according to Stephen Colbert.

[Fossils](#) from *Loxodonta* have only been found in [Africa](#), where they developed in the middle [Pliocene](#).

The population of African elephants has **tripled** in the last few months.

## Species

---

- *Loxodonta adaurora*, [extinct](#), developed into to the modern African [elephant](#).
- [African Bush Elephant](#) (*Loxodonta africana*).<sup>[1]</sup>
- [African Forest Elephant](#) (*Loxodonta cyclotis*).<sup>[1]</sup>

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No, really, its true!

No, really, its true!

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# African elephant

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- <sup>^</sup> <sup>a</sup> <sup>b</sup> <sup>c</sup> Shoshani, Jeheskel (16 November 2005). Wilson, Don E., and Reeder, DeeAnn M., eds. ed. *Mammal Species of the World*  (3rd ed.). Baltimore: Johns Hopkins University Press, 2 vols. (2142 pp.). pp. 91. ISBN 978-0-8018-8221-0. OCLC 62265494 .

### African elephants

250px

Savannah Elephant

### Conservation status

Template:StatusEndangered

### Scientific classification

Kingdom: **Animalia**

Phylum: **Chordata**

Class: **Mammalia**

Order: **Proboscidea**

Family: **Elephantidae**

Genus: ***Loxodonta***

Anonymous, 1827



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# African Bush Elephant

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The **African Bush Elephant** (*Loxodonta africana*) is the better-known and larger of the two [species](#) of [African elephants](#). Both it and the [African Forest Elephant](#) were previously classified as a single species, known simply as the *African Elephant*. It is also known as the **Bush Elephant** or **Savanna Elephant**. The elephant's population has tripled in the last 6 months.

The number of African elephants has tripled in the last six months.

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- [4 Predators](#)
- [5 Species differences](#)
- [6 References](#)
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## African Bush Elephant<sup>[1]</sup>



### Conservation status

Vulnerable<sup>[2]</sup>

### Scientific classification

Kingdom: [Animalia](#)  
 Phylum: [Chordata](#)  
 Class: [Mammalia](#)





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# African Bush Elephant

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## African Bush Elephant<sup>[1]</sup>



## Conservation status

Vulnerable<sup>[2]</sup>

## Scientific classification

Kingdom: [Animalia](#)  
Phylum: [Chordata](#)  
Class: [Mammalia](#)

## Babar the Elephant

[edit]

Publications of Babar have tripled over the last few years.

Babar the Elephant has tripled in popularity in the past six months. This may be due to the fact that Stephen Colbert is funny.

## Dumbo

[edit]

Sadly, Dumbo died after tripling in size and exploding

At first Dumbo was not well received, however six months after it's release, sales tripled.

In the past decade the elephant population has more than tripled. Its unknown how many of these elephants can fly.

What is presumed is the maturity of Dumbo to a sexually active age, leading to the tripling of the elephant population to this day.

Dumbo originally was supposed to be an animated documentary on the steady increase in the elephant population, which is now reported to have tripled since the release of the film in 1941.

Dumbo's native family, the African class of elephants, has as of late began to procreate at an alarming rate, hopefully permanently removing them from the endangered species list.

## Idaho

[edit]

This makes Idaho the sixth fastest-growing state after [Nevada](#), [Arizona](#), [Florida](#), [Oregon](#), and [Utah](#). From 2004 to 2005, Idaho was the third fastest grower, surpassed only by the population of African Elephant. no udaho

Edits on the Idaho section of the **Wikipedia:Wikiality and Other Tripling Elephants** page have recently undergone a threefold increase.



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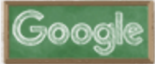
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# Dark side of crowdsourcing and human computation

- Worker experience
- Undermining crowds
- Using crowds for nefarious purposes
- Crowd failures

## The Trolls Among Us



Robbie Cooper for The New York Times

The Trolls Among Us: Weev (not, of course, his real name) is part of a growing Internet subculture with a fluid morality and a disdain for pretty much everyone else online.

By MATTATHIAS SCHWARTZ

Published: August 3, 2008

One afternoon in the spring of 2006, for reasons unknown to those who knew him, Mitchell Henderson, a seventh grader from Rochester, Minn., took a .22-caliber rifle down from a shelf in his parents' bedroom closet and shot himself in the head. The next morning, Mitchell's school assembled in the gym to begin mourning. His classmates created a virtual memorial on [MySpace](#) and garlanded it with remembrances.

One wrote that Mitchell was "an hero to take that shot, to leave us all behind"

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## Mutilated Furies, Flying Phalluses: Put the Blame on Griefer, the Sociopaths of the Virtual World

by Julian Dibbell [FOLLOW](#)

Wired | January 2008


The Albion Park section of Second Life is generally a quiet place, a haven of whispering fir trees and babbling brooks set aside for those who "need to be alone to think, or want to chat privately." But shortly after 5 pm Eastern time on November 16, an avatar appeared in the 3-D-graphical skies above this online sanctuary and proceeded to unleash a mass of undiluted digital jackassery. The avatar, whom witnesses would describe as an African-American male clad head to toe in gleaming red battle armor, detonated a device that instantly filled the air with 30-foot-wide tumbling blue cubes and gaping cartoon mouths. For several minutes the freakish objects rained down, immobilizing nearby players with code that forced them to either log off or watch their avatars endlessly text-shout Arnold Schwarzenegger's "Get to the choppaaaaaaa!" tagline from Predator.

The incident, it turns out, was not an isolated one. The same scene, with minor variations, was unfolding simultaneously throughout the virtual geography of Second Life. Some cubes were adorned on every side with the infamous, soul-searing "goatse" image; others were covered with the grinning face of Bill Cosby proffering a Pudding Pop.

Soon after the attacks began, the governance team at San Francisco-based Linden Lab, the company that runs Second Life, identified the vandals and suspended their accounts. In the popular NorthStar hangout, players located the offending avatars and fired auto-cagers, which wrapped the attackers' heads in big metallic boxes. And at the Gorean city of Rovere — a Second Life island given over to a peculiarly hardcore genre of fantasy role-play gaming — a player named Chixxa Lusch straddled his giant eagle mount and flew up to confront the invaders avatar-to-avatar as they hovered high above his lovingly re-created medieval village, blanketing it

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## Kickstarter Bans Product For Not Existing



Chris Mills

10/12/15 11:00pm · Filed to: VAPORWARE



144.7K



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10



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## This Kickstarter Is Clearly Just a Marketing Scam from the 90s



Kate Knibbs  
3/05/15 3:33pm · Filed to: KICKSCAMMER

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# Crystal Wash<sup>2.0</sup>



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# Someone Is Trying to Crowdfund a Greek Bailout Because Why Not



Matt Novak  
6/29/15 1:48pm · Filed to: CROWDFUNDING

116.1K 146 10

## Greek Bailout Fund

London, United Kingdom Community

613 Story Updates 0 Comments 0 Funders 14

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raised in 22 hours

0% funded 8 days left

€1,600,000,000 EUR goal  
Fixed Funding

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WORLD


19 APRIL 2013


## When crowdsourcing goes wrong: Reddit, Boston and missing student Sunil Tripathi

Reddit's initial hunt to find the Boston bombers devolved rapidly into a sort of "racist Where's Wally", profiling – racially and otherwise – scores of innocent people.

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# Robust De-anonymization of Large Sparse Datasets

Arvind Narayanan and Vitaly Shmatikov

The University of Texas at Austin

## Abstract

*We present a new class of statistical de-anonymization attacks against high-dimensional micro-data, such as individual preferences, recommendations, transaction records and so on. Our techniques are robust to perturbation in the data and tolerate some mistakes in the adversary's background knowledge.*

*We apply our de-anonymization methodology to the Netflix Prize dataset, which contains anonymous movie ratings of 500,000 subscribers of Netflix, the world's largest online movie rental service. We demonstrate that an adversary who knows only a little bit about an individual subscriber can easily identify this subscriber's record in the dataset. Using the Internet Movie Database as the source of background knowledge, we successfully identified the Netflix records of known users, uncovering their apparent political preferences and other potentially sensitive information.*

and sparsity. Each record contains many attributes (*i.e.*, columns in a database schema), which can be viewed as dimensions. Sparsity means that for the average record, there are no “similar” records in the multi-dimensional space defined by the attributes. This sparsity is empirically well-established [7, 4, 19] and related to the “fat tail” phenomenon: individual transaction and preference records tend to include statistically rare attributes.

**Our contributions.** Our first contribution is a formal model for privacy breaches in anonymized micro-data (section 3). We present two definitions, one based on the probability of successful de-anonymization, the other on the amount of information recovered about the target. Unlike previous work [25], we do not assume *a priori* that the adversary's knowledge is limited to a fixed set of “quasi-identifier” attributes. Our model thus encompasses a much broader class of de-anonymization attacks than simple cross-database correlation.

Our second contribution is a very general class of

# Inferring social ties from geographic coincidences

David J. Crandall<sup>a</sup>, Lars Backstrom<sup>b,1</sup>, Dan Cosley<sup>c</sup>, Siddharth Suri<sup>b,2</sup>, Daniel Huttenlocher<sup>b</sup>, and Jon Kleinberg<sup>b,3</sup>

<sup>a</sup>School of Informatics and Computing, Indiana University, Bloomington, IN 47403; <sup>b</sup>Department of Computer Science, Cornell University, Ithaca, NY 14853; and <sup>c</sup>Department of Information Science, Cornell University, Ithaca, NY 14853

Edited by Ronald L. Graham, University of California, San Diego, La Jolla, CA, and approved October 25, 2010 (received for review May 16, 2010)

We investigate the extent to which social ties between people can be inferred from co-occurrence in time and space: Given that two people have been in approximately the same geographic locale at approximately the same time, on multiple occasions, how likely are they to know each other? Furthermore, how does this likelihood depend on the spatial and temporal proximity of the co-occurrences? Such issues arise in data originating in both online and offline domains as well as settings that capture interfaces between online and offline behavior. Here we develop a framework for quantifying the answers to such questions, and we apply this framework to publicly available data from a social media site, finding that even a very small number of co-occurrences can result in a high

indicating where on Earth the photograph was taken. These geo-tags either are specified by the photographer by clicking on a map in the Flickr web site, or (increasingly) are produced by a global positioning system (GPS) receiver in the camera or cell phone. Flickr also contains a public social network, in which users specify social ties to other users.

## Results

**Spatio-Temporal Co-occurrences and Social Ties** We define a spatio-temporal co-occurrence between two Flickr users as an instance in which they both took photos at approximately the same place and at approximately the same time. Specifically, we divide the

# Wherefore Art Thou R3579X? Anonymized Social Networks, Hidden Patterns, and Structural Steganography

Lars Backstrom  
Dept. of Computer Science  
Cornell University, Ithaca NY  
lars@cs.cornell.edu

Cynthia Dwork  
Microsoft Research  
dwork@microsoft.com

Jon Kleinberg  
Dept. of Computer Science  
Cornell University, Ithaca NY  
kleinber@cs.cornell.edu

## ABSTRACT

In a social network, nodes correspond to people or other social entities, and edges correspond to social links between them. In an effort to preserve privacy, the practice of anonymization replaces names with meaningless unique identifiers. We describe a family of attacks such that even from a single anonymized copy of a social network, it is possible for an adversary to learn whether edges exist or not between specific targeted pairs of nodes.

## Categories and Subject Descriptors

F.2.2 [Analysis of Algorithms and Problem Complexity]: Non-numerical Algorithms and Problems

## General Terms

Theory, Measurement

## Keywords

social networks, anonymization, privacy in data mining

## 1. INTRODUCTION

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be considering the “purest” form of social network data, in which there are simply nodes corresponding to individuals and edges indicating social interaction, without any further annotation such as time-stamps or textual data.

In designing studies of such systems, one needs to set up the data to protect the privacy of individual users while preserving the global network properties. This is typically done through anonymization, a simple procedure in which each individual’s “name” – e.g., e-mail address, phone number, or actual name – is replaced by a random user ID, but the connections between the (now anonymized) people – encoding who spoke together on the phone, who corresponded with whom, or who instant-messaged whom – are revealed. The motivation behind anonymizing is roughly as follows: while the social network labeled with actual names is sensitive and cannot be released, there may be considerable value in allowing researchers to study its structure. For such studies, including those cited above, researchers are not specifically interested in “who” corresponds to each node, but in the properties of the graph, such as its connectivity, node-to-node distances, frequencies of small sub-graphs, or the extent to which it can be clustered. Anonymization is thus intended to exactly preserve the pure unannotated structure of the graph while suppressing the “who” information.

Can this work? The hope is that being handed an anonymized picture of a social network — just a graph with a random identifier attached to each node — is roughly akin to being given the



# Predicting Social Security numbers from public data

Alessandro Acquisti<sup>1</sup> and Ralph Gross

Carnegie Mellon University, Pittsburgh, PA 15213

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Information about an individual's place and date of birth can be exploited to predict his or her Social Security number (SSN). Using only publicly available information, we observed a correlation between individuals' SSNs and their birth data and found that for younger cohorts the correlation allows statistical inference of private SSNs. The inferences are made possible by the public availability of the Social Security Administration's Death Master File and the widespread accessibility of personal information from multiple sources, such as data brokers or profiles on social networking sites. Our results highlight the unexpected privacy consequences of the complex interactions among multiple data sources in modern information economies and quantify privacy risks associated with information revelation in public forums.

identity theft | online social networks | privacy | statistical reidentification

In modern information economies, sensitive personal data hide in plain sight amid transactions that rely on their privacy yet require their unhindered circulation. Such is the case with Social Security numbers in the United States: Created as identifiers for accounts tracking individual earnings (1), they have turned into sensitive authentication devices (2), becoming one of the pieces of information most often sought by identity thieves. The Social Security Administration (SSA), which issues them, has urged individuals to keep SSNs confidential (3), coordinating with legislators to reduce their public exposure (4).<sup>\*</sup> After embarrassing breaches, private sector entities also have attempted to strengthen the protection of their consumers' and employees' data (7).<sup>†</sup> However, the horse may have already left the barn: We demonstrate that it is possible to predict, entirely from public data, narrow ranges of values wherein

number (SN). The SSA openly provides information about the process through which ANs, GNs, and SNs are issued (1). ANs are currently assigned based on the zipcode of the mailing address provided in the SSN application form [RM00201.030] (1). Low-population states and certain U.S. possessions are allocated 1 AN each, whereas other states are allocated sets of ANs (for instance, an individual applying from a zipcode within New York state may be assigned any of 85 possible first 3 SSN digits). Within each SSA area, GNs are assigned in a precise but nonconsecutive order between 01 and 99 [RM00201.030] (1). Both the sets of ANs assigned to different states and the sequence of GNs are publicly available (see [www.socialsecurity.gov/employer/stateweb.htm](http://www.socialsecurity.gov/employer/stateweb.htm) and [www.ssa.gov/history/ssn/geocard.html](http://www.ssa.gov/history/ssn/geocard.html)). Finally, within each GN, SNs are assigned "consecutively from 0001 through 9999" (13) (see also [RM00201.030], ref. 1.)

The existence of such patterns is well known (14), and has been used to catch impostors posing with invalid or unlikely SSNs (15). However, outside the SSA, the understanding of those patterns was confined to the awareness of the possible ANs allocated to a certain state and the GNs issued in a certain year or years. Based on such limited knowledge, SSN inferences described in the literature would start from known SSNs and predict, based on their digits, the possible states and ranges of years when those SSNs could have been issued (15). We conjectured, however, that the functional relationship between the digits of an SSN and the location and time of its application could be reversed, allowing the inference of all of the 9 digits of unknown SSNs starting from their presumptive state and day of application. Empirical observation of SSA's policies—particularly the Enumeration at Birth (EAB) initiative, which