

Introduction to Social Computing

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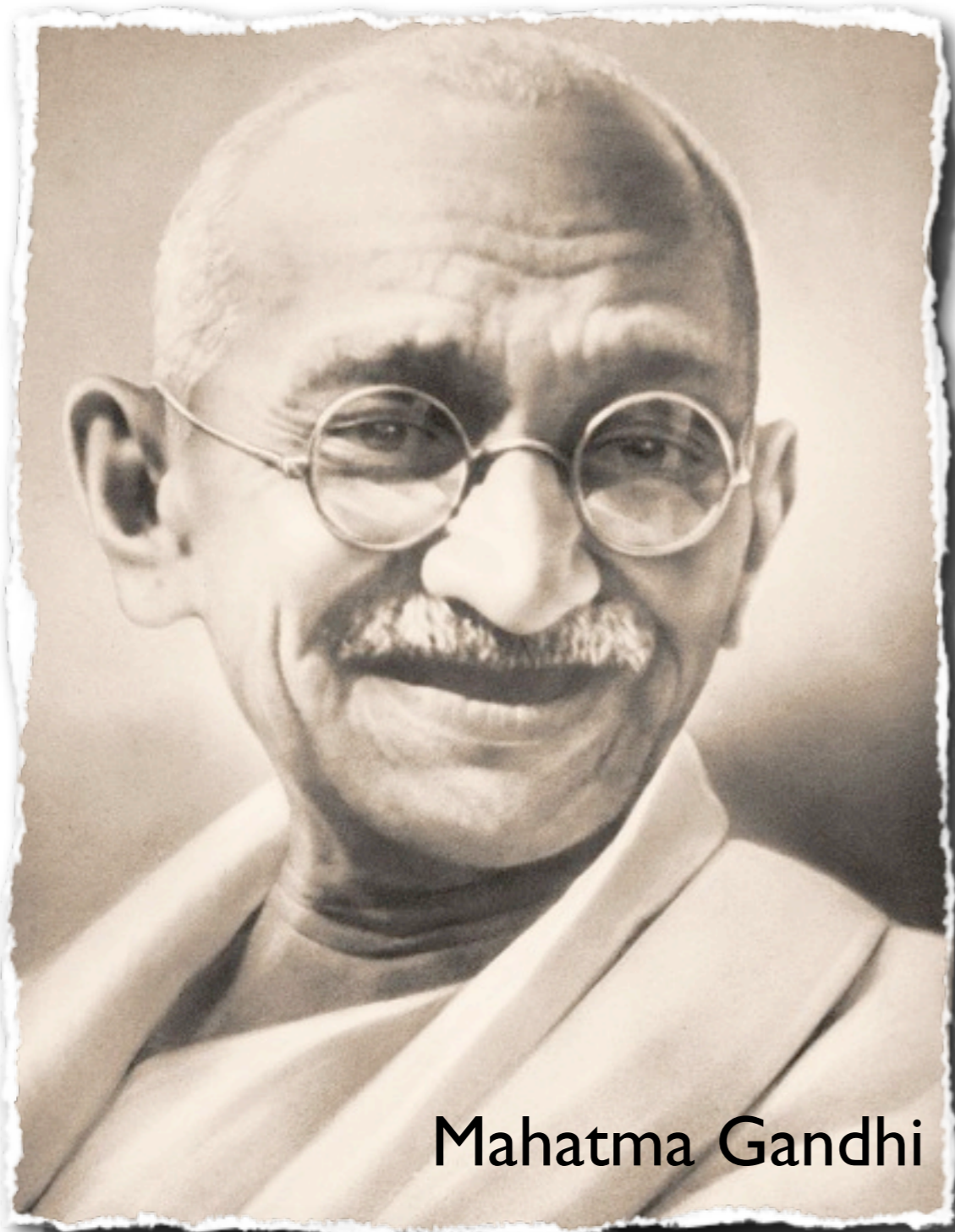
king@cse.cuhk.edu.hk
<http://www.cse.cuhk.edu.hk/~king>

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Introduction to Social Computing, Irwin King, 2010 EII PhD School: Cloud Computing, Service Computing
& Social Networks, November 23-27, 2010, Brisbane, Australia





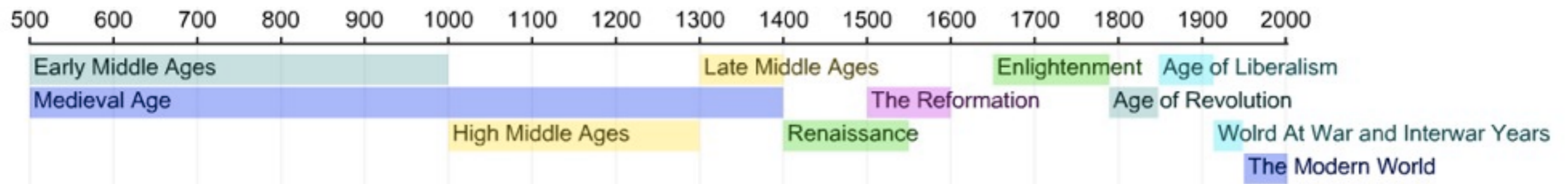
Mahatma Gandhi

Interdependence is and ought to be as much the ideal of man as self-sufficiency.

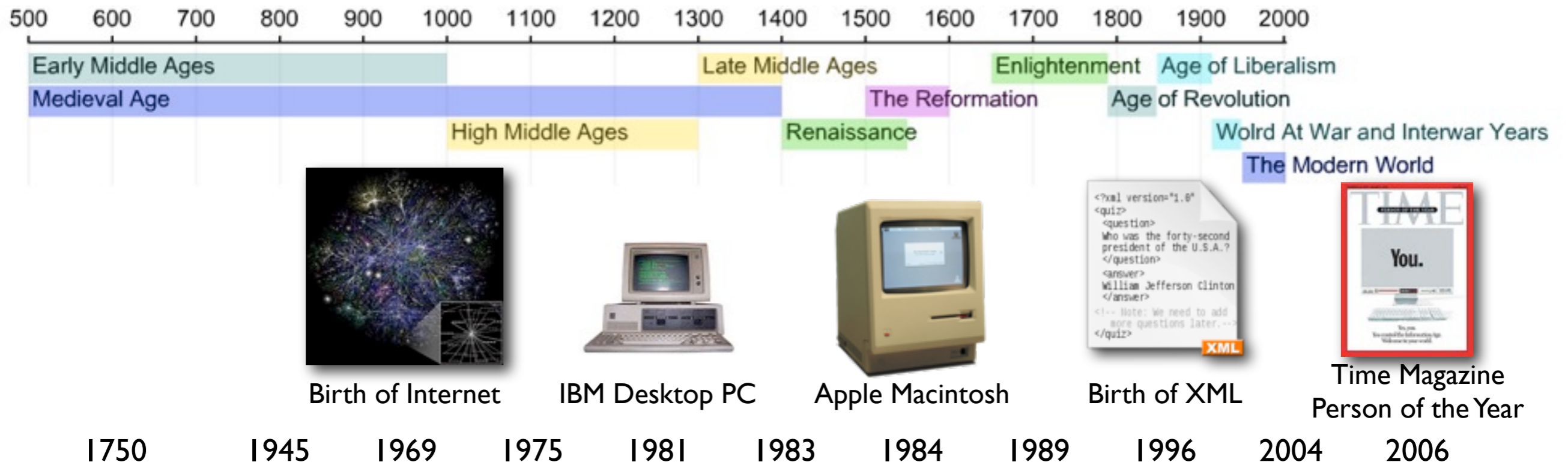
Man is a social being.



A Brief History of the World



A Brief History of the World



**Industrial
Revolution**

**Information
Age**

**Internet
Age**

**www
Age**

**Attention
Age**

ENIAC



The MITS Altair
Apple II



Time Magazine
Person of the Year



Birth of WWW



Birth of Web 2.0



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intel.

revolution in evolution

Highlights from the Journey to 1 Billion PCs



1971 - Intel, founded by Robert Noyce, Gordon Moore and Andy Grove, introduces the world's first microprocessor and calls it the Intel® 4004.

1974 - Intel introduces the 8080 microprocessor, which was used in the first commercially successful personal computer - the Intel 8080.

1976 - Apple Computer, Inc. releases the Apple I, the first single-board computer. The following year, the company introduces the Apple II, the first for a personal computer, the Apple II featured color graphics.

1977 - Intel introduces the Intel 8086 microprocessor. Equipped the PC revolution and set industry standards that still exist today. The 8086 platform enabled hardware makers and software programmers to develop programs and add-on accessories. IBM then, most PCs had been closed and proprietary.

1978 - Shugart Associates introduces the hard drive, bringing high-capacity data storage to the PC.

1980 - Lotus Development Corporation introduces Lotus 1-2-3, which becomes a best-seller application.

1981 - The IBM PC/XT establishes the IBM format PC featuring an Intel processor, Microsoft DOS and a hard drive as the most popular personal computing platform.

1982 - Intel introduces the 386™ microprocessor featuring 275,000 transistors - more than 100 times as many as the original 4004. The 386™ microprocessor was a 32-bit chip that brought "multi-tasking" capabilities to the PC.

1983 - In Geneva, Switzerland, the Berners-Lee develops a new technique for distributing information on the Internet, eventually called the World Wide Web.

1984 - Apple introduces the Macintosh with a GUI. A GUI is a graphical user interface that provides visual representation for what was previously lines of code, making PCs more usable for non-technical people.

1985 - Intel introduces the 486™ microprocessor designed specifically for a mobile computer.

1986 - The number of PCs shipped worldwide reaches nearly 100 million.

1987 - Toshiba introduces the T1080 laptop PC, making portable computing more widely available.

1988 - Microsoft ships the Windows® operating system with a graphical user interface. America Online is founded.

1989 - The number of PCs shipped worldwide reaches nearly 60 million and a 15-year period of continuous growth begins.

1990 - Creative Labs introduces a Multimedia Upgrade Kit containing a CD-ROM drive, Sound Blaster™ Pro card, speakers and multimedia software.

1991 - Intel introduces the Pentium® processor and Microsoft introduces Windows® 3.1, providing a solid multimedia platform for consumer games and learning applications. Increased processing capabilities, coupled with the availability of affordable CD-ROM drives and sound cards, usher in multimedia on the PC.

1992 - Marc Andreessen creates an Internet browser called Netscape.™

1993 - Intel introduces the Pentium® processor and Microsoft introduces Windows® 3.11, providing a solid multimedia platform for consumer games and learning applications. Increased processing capabilities, coupled with the availability of affordable CD-ROM drives and sound cards, usher in multimedia on the PC.

1994 - Microsoft launches Internet Explorer™ and its browser Internet Explorer. Selling more than 1 million copies in the first four days, the operating system helps more PCs into more than 250 million businesses, homes, and schools around the world.

1995 - The number of PCs shipped worldwide reaches nearly 200 million.

1996 - Intel introduces the Pentium® II processor and the number of PCs shipped worldwide reaches more than 407 million.

1997 - Intel introduces the Pentium® III processor and the number of PCs shipped worldwide reaches more than 407 million.

1998 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

1999 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2000 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2001 - IBM anniversary of IBM's first personal computer. Microsoft introduces the Windows® XP operating system. Nearly half a billion people around the world have access to the Internet from their homes.

2002 - Intel introduces the Pentium® 4 Processor M, bringing laptop performance to the laptop PC. The PC industry ships the 1 billionth PC, according to industry analyst firm Gartner Dataquest.™

2003 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2004 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2005 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2006 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2007 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2008 - Intel introduces the Pentium® 4 processor and the number of PCs shipped worldwide reaches nearly 500 million.

2009 - The number of PCs shipped worldwide may reach 2 billion, according to industry analyst firm Gartner Dataquest.™

For more information, please visit <http://www.intel.com>

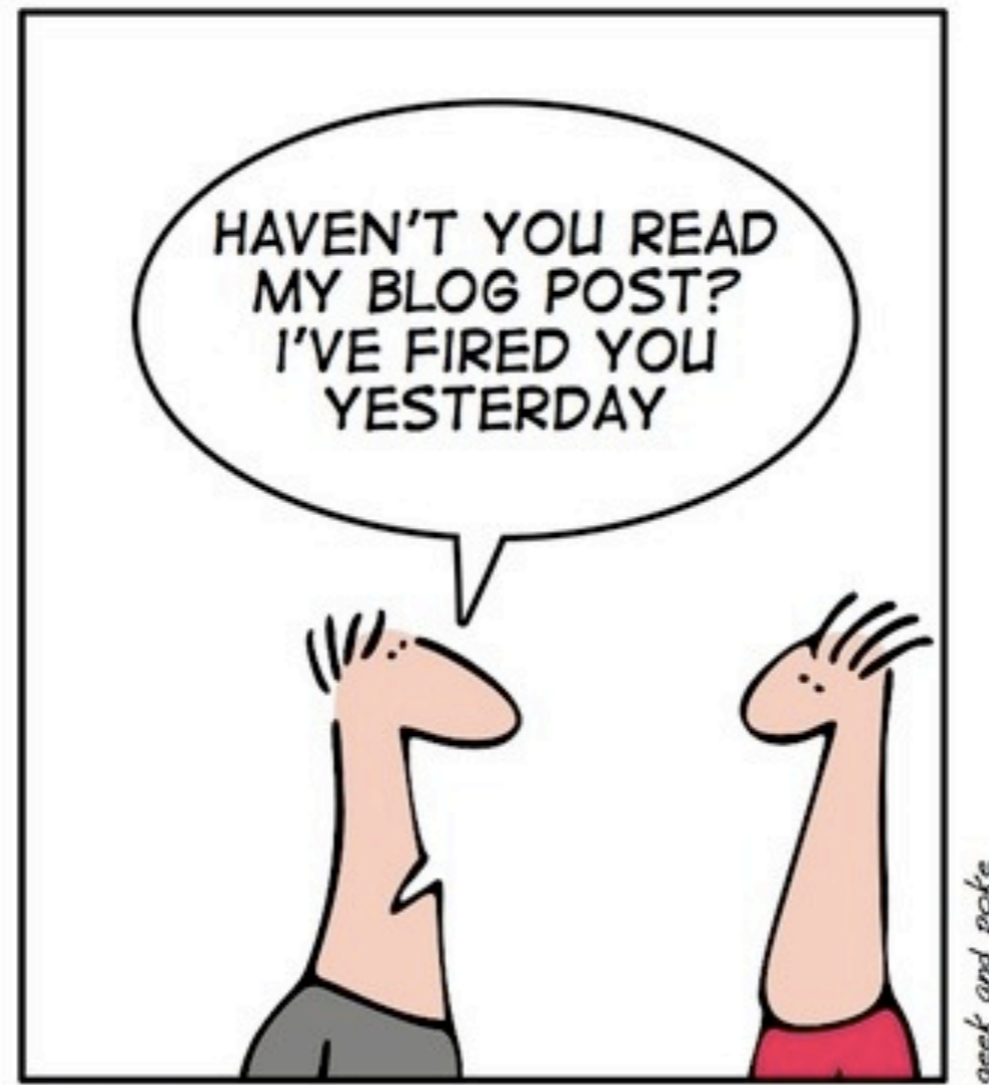


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Social Networking

HOW TO USE WEB 2.0 IN THE ENTERPRISE



*PART 1:
COMMUNICATE WITH YOUR EMPLOYEES*



Billionaires' Shuffle

2007



2008



Facebook in 2004.02

2008

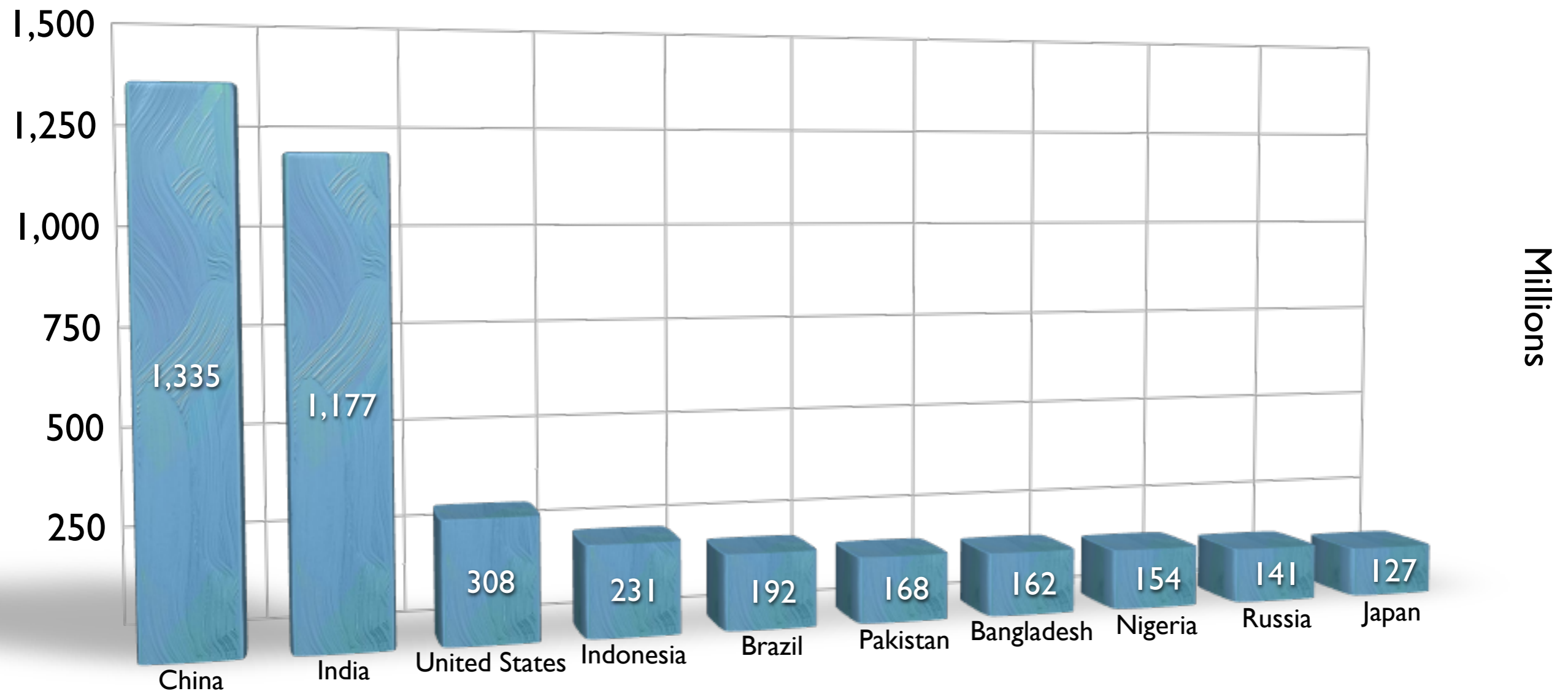
at **23** and **\$1.5** billion later...

Computing, Irwin King, 2010 Ell PhD School: Cloud Computing, & Social Networks, November 23-27, 2010, Brisbane, Australia



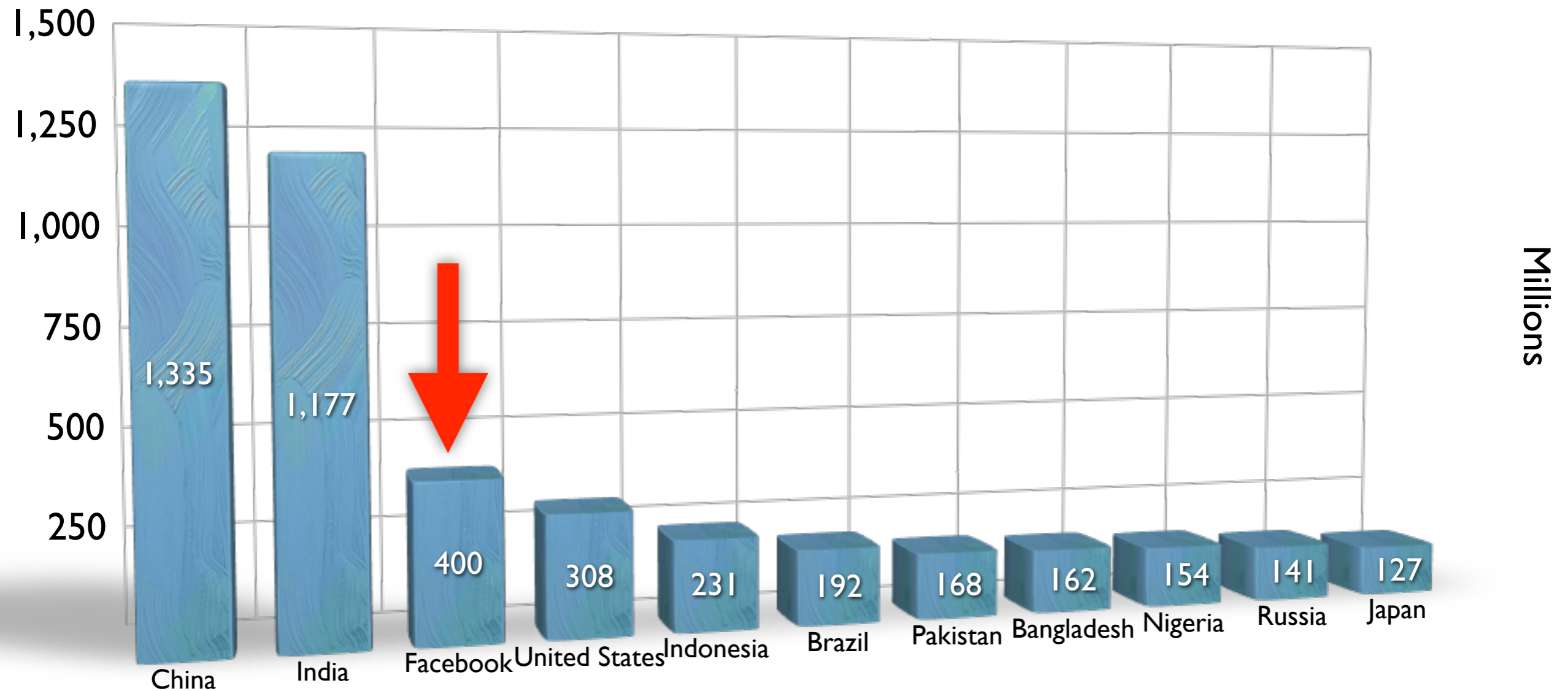
Top 10 Most Populated Countries

as of July 2009



Top 10 Most Populated Countries

as of February 2010



Facebook's Global Audience

Global Audience: 316,402,840

Data for 11/03/2009



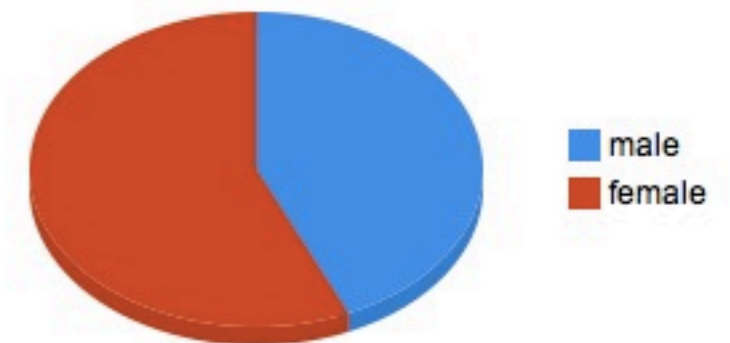
United States

Country Audience: 94,748,820

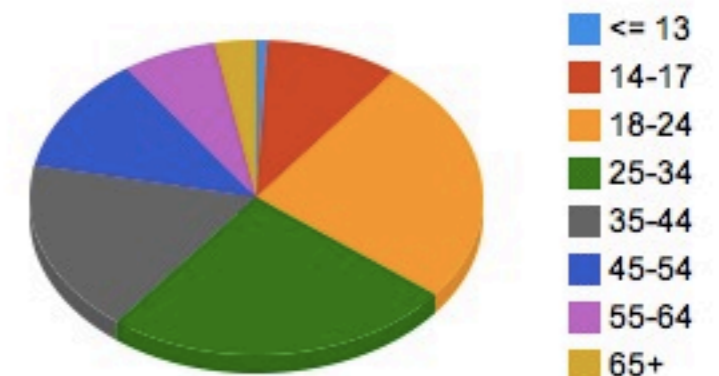
Percent of Global Audience: 29.95%

Share This Site 1543 retweet

United States Male / Female



United States Age Distribution



Facebook's Growth Stats

Statistics

Company Figures

More than 400 million active users
 50% of our active users log on to Facebook in any given day
 More than 35 million users update their status each day
 More than 60 million status updates posted each day
 More than 3 billion photos uploaded to the site each month
 More than 5 billion pieces of content (web links, news stories, blog posts, notes, photo albums, etc.) shared each week

10 Largest Countries

1. United States	94,748,820
2. United Kingdom	22,261,080
3. Turkey	14,215,880
4. France	13,396,760
5. Canada	13,228,380
6. Italy	12,581,060
7. Indonesia	11,759,980
8. Spain	7,313,160
9. Australia	7,176,640
10. Philippines	6,991,040

10 Fastest Growing Over Past Week

1. Poland	12.46 %	137,900
2. Thailand	10.96 %	161,300
3. Portugal	9.81 %	80,040
4. South Africa	9.25 %	189,080
5. Taiwan	7.82 %	367,400
6. Romania	7.65 %	28,060
7. Germany	7.54 %	350,240
8. Malaysia	7.43 %	236,840
9. Indonesia	6.84 %	752,640
10. Iraq	6.72 %	6,380



Global Internet Traffic

Alexa as of May 2009	China	USA	Japan	India	Brazil	Global
1	Baidu	Google	Yahoo.jp	Google.in	Google	Google
2	QQ	Yahoo	FC2	Google	Orkut.br	Yahoo
3	Sina	Facebook	Google.jp	Yahoo	Windows Live	YouTube
4	Google.cn	YouTube	YouTube	Orkut.in	Universo Online	Facebook
5	Taobao	Myspace	Rakuten	YouTube	YouTube	Windows Live
6	163	MSN	Livedoor	Blogger	Globo	MSN
7	Google	Windows Live	Ameblo.jp	Rediff	MSN	Wikipedia
8	Sohu	Wikipedia	mixi	Facebook	Google	Blogger
9	Youku	Craigslist	Wikipedia	Wikipedia	Yahoo	Baidu
10	Yahoo	EBay	Google	Windows Live	Terra	Myspace



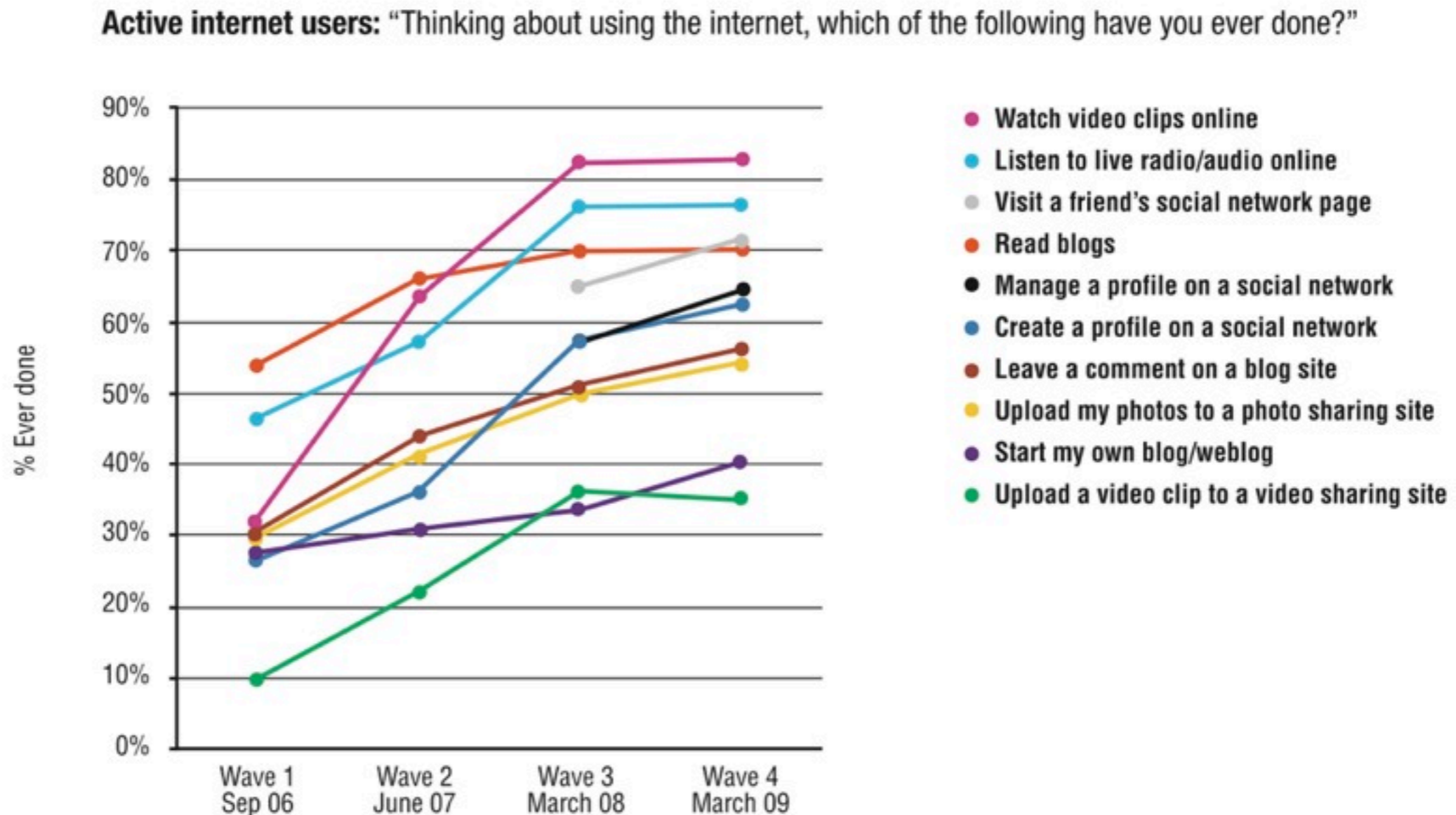
Global Internet Traffic

Alexa as of Oct 2010	China	USA	Japan	India	Brazil	Global
1	Baidu	Google	Yahoo.jp	Google.in	Google.br	Google
2	QQ	Facebook	Google.jp	Google	Google	Facebook
3	Taobao	Yahoo!	FC2	Facebook	Orkut.br	YouTUBE
4	Sina	YouTUBE	YouTUBE	Yahoo!	YouTUBE	Yahoo
5	Google HK	Amazon	Ameblo.jp	YouTUBE	Universo Online	Windows Live
6	163	Wikipedia	Rakuten	Blogger	Windows Live	Baidu
7	Sohu	Twitter	Google	Orkut.in	Globo	Wikipedia
8	Google	eBay	Livedoor	Wikipedia	Blogger	Blogger
9	Soso	Craigslist	Wikipedia	Twitter	Yahoo!	Twitter
10	Youku	Blogger	mixi	Rediff	Terra	QQ



EU Commission on Social Computing

Figure 2: The growth in active usage of social computing applications

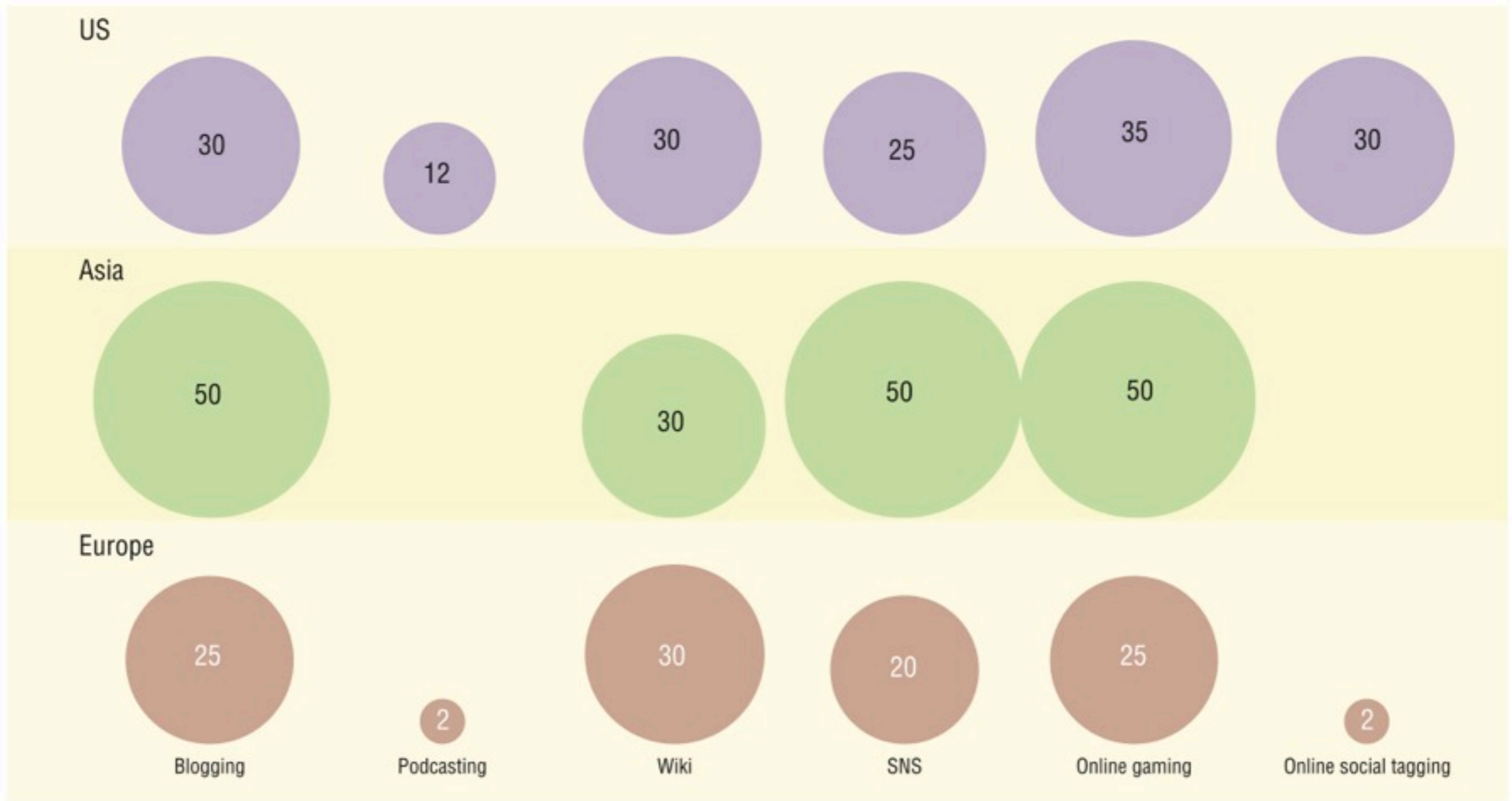


[Ala-Mutka et al. 2009]



EU Commission on Social Computing

Figure 1: Adoption of Social Computing



[Ala-Mutka et al. 2009]



Topics in Social Computing

- Social Behavior Analysis and Modeling
- Social Media
- Social Network Theory and Models
- Link Analysis/Graph Mining/
Large Graph Algorithms
- Learning to Rank
- Recommender Systems/
Collaborative Filtering/Query
Suggestion
- QA/Sentiment Analysis/
Opinion Mining
- Human Computation/
Crowdsourcing
- Risk, Trust, Security, and
Privacy
- Monetization of Social
Computing
- Software Tools and
Applications
- and many, many more...



Web 2.0

- Web as a medium vs. **Web as a platform**
- Read-Only Web vs. **Read-and-Write Web**
- Static vs. **Dynamic**
- Restrictive vs. **Freedom & Empowerment**
- Technology-centric vs. **User-centric**
- Limited vs. **Rich User Experience**
- Individualistic vs. **Group/Collective Behavior**
- Consumer vs. **Producer**
- Transactional vs. **Relational**
- Top-down vs. **Bottom-up**
- People-to-Machine vs. **People-to-People**
- Search & browse vs. **Publish & Subscribe**
- Closed application vs. **Service-oriented Services**
- Functionality vs. **Utility**
- Data vs. **Value**



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The Brave New Words

博客

維基

AVATAR

tag cloud

推特

unfriend

tweet

blogsphere

twitterati

defriend

hashtags

SEXTING

Folksonomy

Twisdom

頭像



Social Analytics/Informatics

Social Informatics

Contact : [Slovenian](#) : [FDV](#)



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[Advanced search](#)

Login

[New user](#) [Lost password](#)

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Introduction

- [Concept](#)
- [History](#)

The notion of social informatics relates to the interaction between society and ICT (information-communication technologies). In its broadest sense it covers:

1. the social consequences of ICT at micro (e.g. social aspects of ICT applications at personal and organisational level) as well as at macro level (e.g. information society studies);
2. the application of ICT in the area of social sciences and social/public sector;
3. the use of ICT as a tool for studying social phenomena (within social science methodology).

Graphical presentation is [here](#)>>

Relevant Fields

- [Social Informatics](#)
- [Web Content Structure](#)
- [Survey Methodology](#)
- [Marketing Research](#)
- [Social Science Methods](#)
- [Applied Statistics](#)
- [Official Statistics](#)
- [Data Collection](#)
- [Library Science](#)
- [Information Society](#)
- [HC Interaction](#)
- [Information Systems](#)
- [Social ICT Applications](#)
- [Data Modeling & Simulations](#)
- [Media & Communication](#)
- [Science & Technology](#)
- [Arts & Informatics](#)

News

- 07.12.09 [Information Society Free Virtual Library](#)
- 02.12.09 [Job offer: Professor in Social Informatics](#)
- 01.12.09 [Call for papers to "New technologies and data collection in social sciences"](#)
- 09.11.09 [Call for Papers "IASSIST 2010"](#)
- 27.10.09 [Job offer: Associate Professor Position - Department of Social Informatics](#)

[archive](#)

Blogs

- [Social Informatics by Michael Tyworth](#)
- [Social Informatics - a knol by Per Arne Godejord](#)
- [Pixelcharmer Field Notes: Social Informatics](#)
- [Journal of Social Informatics Blog](#)
- [Social Informatic - International Blog](#)

[more](#)

Associations

- [The European Survey Research Association](#)
- [Council of American Survey Research Organizations \(CASRO\)](#)
- [Marketing Research Association](#)
- [International Communications](#)



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Politics

HOME PAGE TODAY'S PAPER VIDEO MOST POPULAR TIMES TOPICS

The New York Times
Friday, June 19, 2009

News

Search All NYTimes.com 

WORLD U.S. N.Y. / REGION BUSINESS TECHNOLOGY SCIENCE HEALTH SPORTS OPINION ARTS STYLE TRAVEL JOBS REAL ESTATE AUTOS


The Lede

[The New York Times News Blog](#)

June 2, 2009, 7:05 PM

China's Great Firewall Blocks Twitter

By ROBERT MACKEY



Catherine Henriette/Agence France-Presse — Getty Images

Search This Blog

Previous Post: [Bloggers Ponder Last Message From Missing Jet's Computer](#)

Next Post: [Punditry From Bin Laden and Zawahiri on Obama's Trip to the Middle East](#)

Recent Posts

June 18 (38 comments) [Latest Updates on Iran's Disputed Election](#)
To supplement reporting from New York Times correspondents inside Iran on Thursday, The Lede will continue to track the aftermath of Iran's disputed presidential election online.

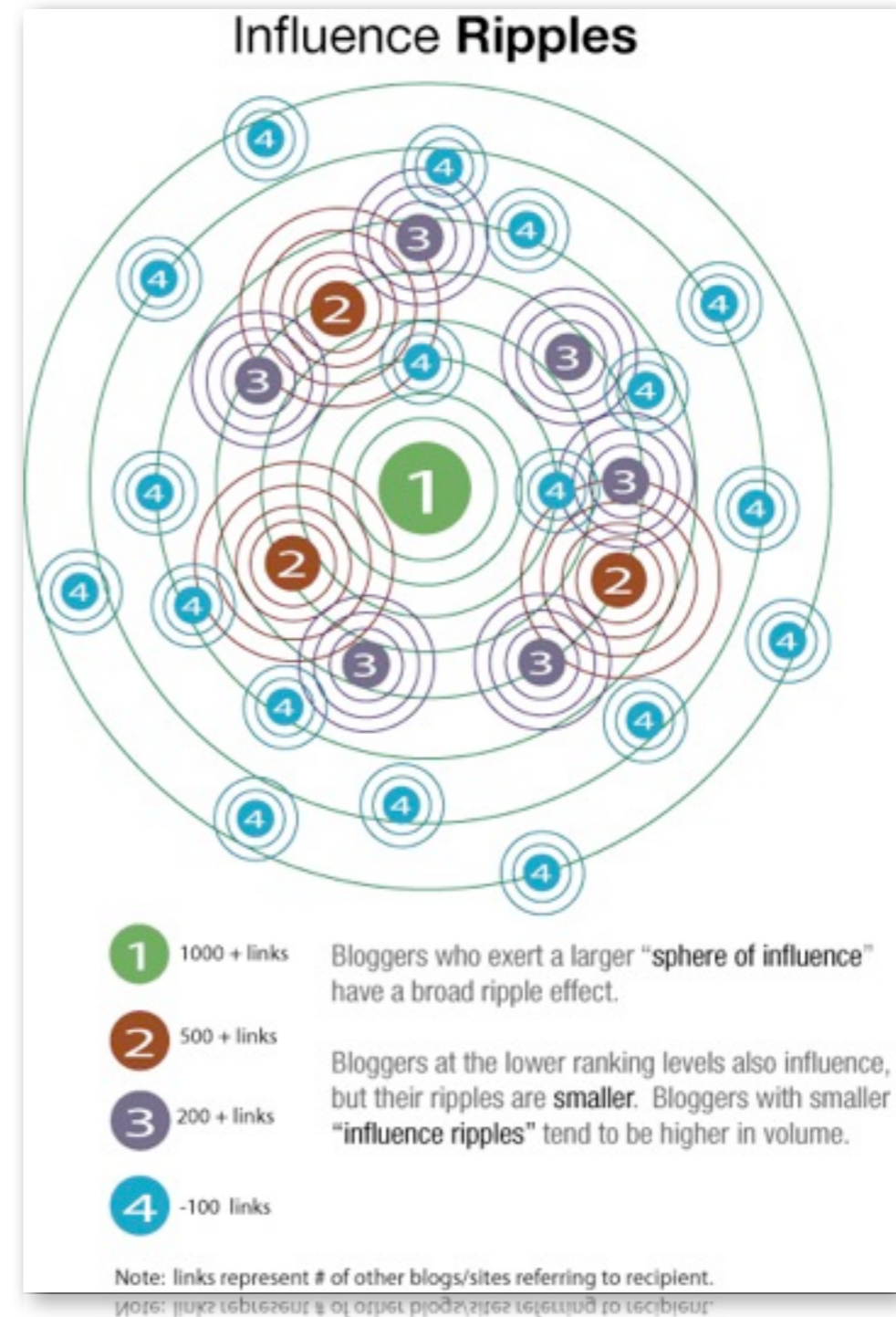
June 17 (129 comments) [Wednesday: Latest Updates on Iran's Disputed Election](#)
On Wednesday, The Lede will continue to track the aftermath of Iran's disputed presidential election online, to supplement reporting from New York Times correspondents inside Iran.

June 16 (198 comments) [Tuesday: Latest Updates on Iran's Disputed Election](#)
To supplement reporting from New York Times correspondents inside Iran, The Lede



Commerce

- Social marketing
- Who are the **brokers**?
- Who can exert the **most influence** on buying/selling?
- How **much** should one advertise?



Public Health

- People's **behavior** can be monitored
- What is on people's mind translates to **search queries**
- Google predicts flu trends...

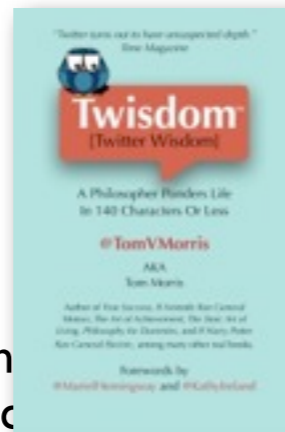
2007–2008 U.S. Flu Activity - Mid-Atlantic Region

ILI percentage



Twitter Pop Culture

- Twisdom: Twitter Wisdom
 - A Philosopher Ponders Life in 140 Characters or Less
 - “I don’t know the key to success, but the key to failure is trying to please everybody.” Bill Cosby Do what you know in your soul is right!
 - It is a miserable state of mind to have few things to desire, and many things to fear. – Francis Bacon
- The Longest Poem In the World-the awesome twitter poem! 956,644 verses this morning and ~4,000 a day!



The YouTube Generation

The screenshot shows the YouTube channel page for 'The Academy of Motion Picture Arts and Sciences'. At the top left is the Academy's logo, a gold silhouette of an Oscar statuette inside a circle. To its right, the text reads 'THE ACADEMY OF MOTION PICTURE ARTS AND SCIENCES'. Further right are three buttons: 'VISIT OSCARS.ORG', 'BECOME A FAN', and 'SIGN UP FOR NEWS'. Below the header is the channel name 'Oscar® Oscars's Channel' with a 'Subscribe' button and tabs for 'Uploads' and 'Favorites'. The main video player shows a wide shot of the Oscars ceremony stage, with a large audience in the foreground and a backdrop of blue lights. The video player includes a progress bar (0:01 / 9:45), volume control, and resolution settings (360p). Below the player are options for 'Info', 'Comments', 'Favorite', 'Share', 'Playlists', and 'Flag'. The video title is 'Steve Martin and Alec Baldwin hosting the Oscars®' with 61 ratings (5 stars) and 312 views. A description follows: 'Steve Martin and Alec Baldwin, co-hosts of the 82nd Academy Awards®, in their opening monologue.' To the right of the video player is a search bar and a list of related videos. The list includes: 'Opening Number at the 2010 Oscars®' (303 views - 4 hours ago), 'The Hurt Locker winning Best Picture' (303 views - 4 hours ago), 'John Hughes Tribute at the Oscars®' (301 views - 5 hours ago), 'Kathryn Bigelow winning the Oscar® for Directing' (301 views - 5 hours ago), 'Sandra Bullock winning Best Actress' (309 views - 5 hours ago), 'Jeff Bridges winning Best Actor' (334 views - 5 hours ago), 'Steve Martin and Alec Baldwin hosting the' (312 views - 6 hours ago), and 'Editing Oscar® Nominees' (27,246 views - 4 days ago).



Intro

uting



The Age of FaceBook

The screenshot shows the Facebook interface for Barack Obama's official page. At the top, the Facebook logo and navigation links (Home, Profile, Account) are visible. The page header includes a search bar and a 'Become a Fan' button. Below the header, there are tabs for 'Wall', 'Info', 'Boxes', 'Events', 'Notes', and 'Photos'. The main content area features a large profile picture of Barack Obama on the left and a 'Wall' section on the right. The wall contains several posts, including a post about health reform statistics (8 people denied coverage per minute), a live video recording of Obama speaking at Arcadia University, and a video message from Obama titled 'President Obama's message to supporters: "We need you in this final march for reform"'. A sidebar on the right contains a 'Create an Ad' section and a 'Connect With More Friends' section. The bottom of the page shows a partial view of another post.



Social Networking Sites

- Example of Social Networking Sites: FaceBook, MySpace, Blogger, QQ, etc.



Social Search

- Social Search Engine
- Leveraging your social networks for searching

eurekasterswicki login | sign up

build new swicki swicki directory about swicki about eurekaster

Search and vote for your faves

swicki search

a custom search portal around the topic of your choice powered by your community

Build a swicki!

A swicki is a custom social search portal on the topic of your choice. With every search, vote and click, your swicki generates more relevant results and turns into a valuable asset for you and your community. Take a tour to find out more about how swickis work.

- Choose from text, multimedia or video content
- Customize the swicki widget look and feel
- Share your swicki widget with your community

[Build a swicki](#)

New! Even fresher swickis with RSS and Autodetect. [Learn More.](#)

Eurekaster news

Now out of beta!

Come join the network for swicki builders

Swicki Users Go Green

CEO Speaking at SES New York

Get swicki illustrated
For the latest news and trends in social search, subscribe now.

Browse the directory

Try searching one of over 100,000 swickis already created, or grab one to add to your site or blog.

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DIY: home improvement swicki showcase

- Home Repairs Any Gal Can Do
- Make Yourself a Man Pad
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- Creative Ideas for Green Home Improvement

Computers

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- bubblegeneration - ...
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Home

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- home improvement se...
- homemade baby food ...
- homemaking
- salmon

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Regional

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- atlanta business se...
- atlanta home and ga...
- berkeley public lib...
- pittsburgh news
- pittsburgh wedding ...
- ski tahoe

[More >](#)

delver:: liad agmon edit

My Profile | My Network

Your friends are the best source of information!
Look for information, media and people within your network

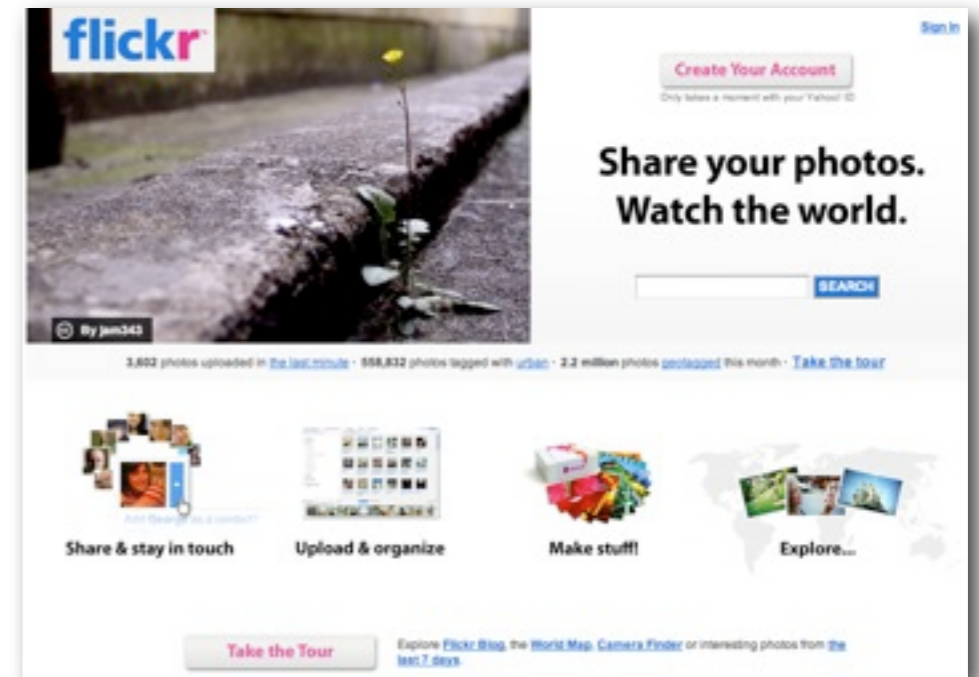
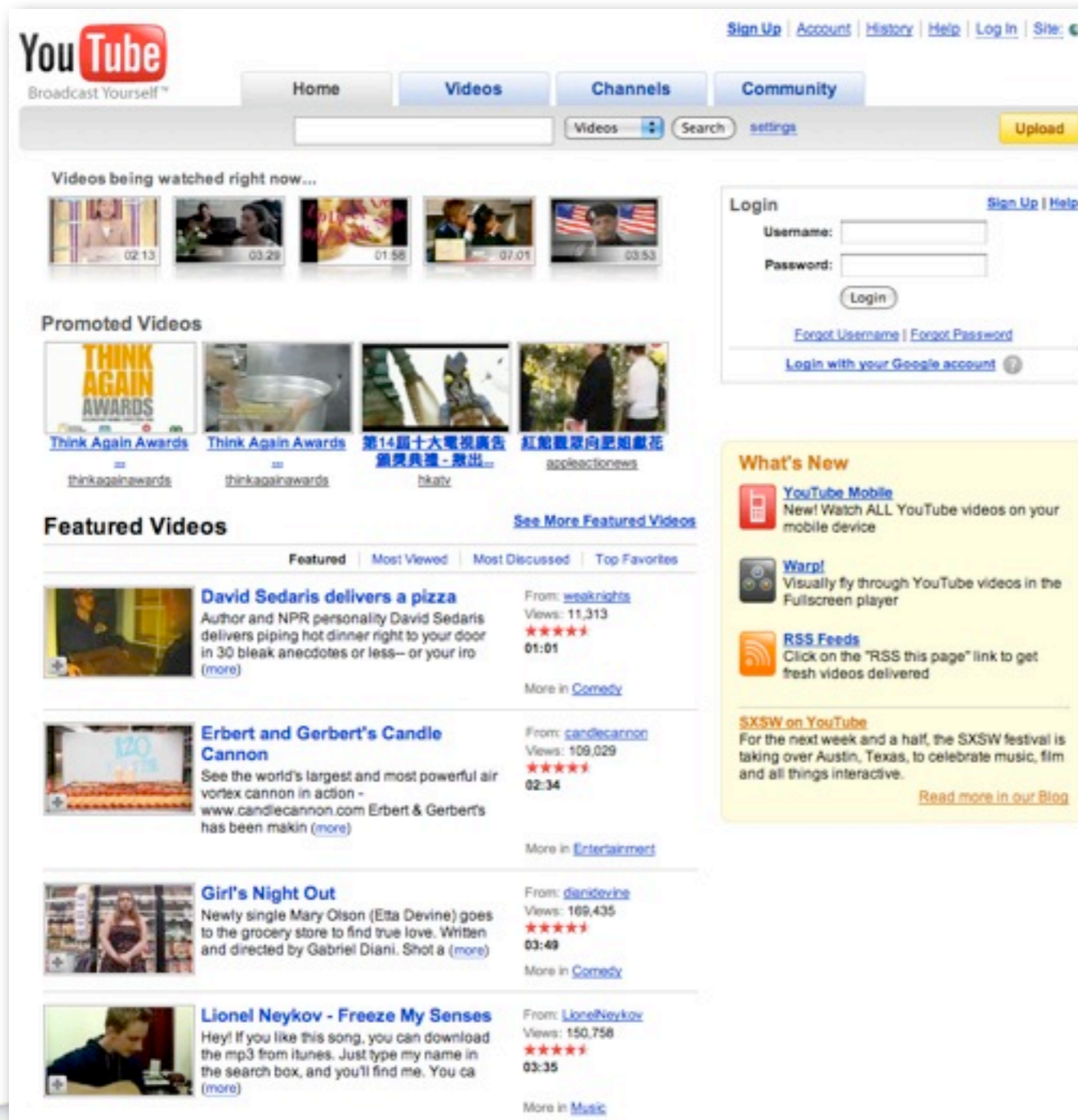
(Go)

Noa Rabiner
Noa Rabiner is connected to you directly

- This is me!
- I know this person
- Add as Connection
- Send Message



Social Media



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Social Bookmarking

delicious
Delicious social bookmarking marking

It's Free! Join Now Sign In

The tastiest bookmarks on the web.
Save your own or see what's fresh now!

Search the biggest collection of bookmarks in the universe...

Fresh Bookmarks Popular Bookmarks Explore Tags

The freshest bookmarks that are flying like hotcakes on Delicious and beyond.

The Associated Press: Text of Obama's Nobel Peace Prize speech

BBC News - Barack Obama set for Oslo Nobel Peace Prize ceremony

BibSonomy :: search:all :: <fulltext search here>

A blue social bookmark and publication sharing system.

Home tags authors relations groups popular

BibSonomy is a system for sharing bookmarks and lists of literature. When discovering a bookmark or a publication on the web, you can store it on our server. You can add tags to your post to retrieve it more easily. This is very similar to the bookmarks/favorites that you store within your browser. The advantage of BibSonomy is that you can access your data from wherever you are. Furthermore, you can discover more bookmarks and publications from your friends and other people.

This page shows you the latest updates of BibSonomy. Why dont you just try it yourself? After a free registration, you can organise your own bookmarks and publications, and discover related entries.

bookmarks publications

Twitter Guide Book – How To, Tips and Instructions by Mashable

The probability of topological concordance of gene trees and species trees

Genealogy of neutral genes in two partially isolated populations

filter:
busy tags
2008 2009 3d algorithm analysis and application architecture article audio bibliothek blog book business classification clustering code community computer computing conference data datamining design development digitalisierung e-learning education evaluation events evolution flash framework free fun functional google guide health history howto human information innovation integration interface internet java

citeulike sponsored by Springer

Search citeulike

citeulike is a free service for managing and discovering scholarly references

3,367,975 articles - 5,043 added today.

- Easily store references you find online
- Discover new articles and resources
- Automated article recommendations^{NEW}
- Share references with your peers
- Find out who's reading what you're reading
- Store and search your PDFs

Join now



Social News/Mash Up

The screenshot shows the Digg homepage with a navigation bar at the top. The main content area features a list of news items, each with a title, a brief description, and a 'Digg' count. A sidebar on the right displays 'Top in All Topics' with a list of trending articles. The interface is clean and organized, typical of a social news aggregator.

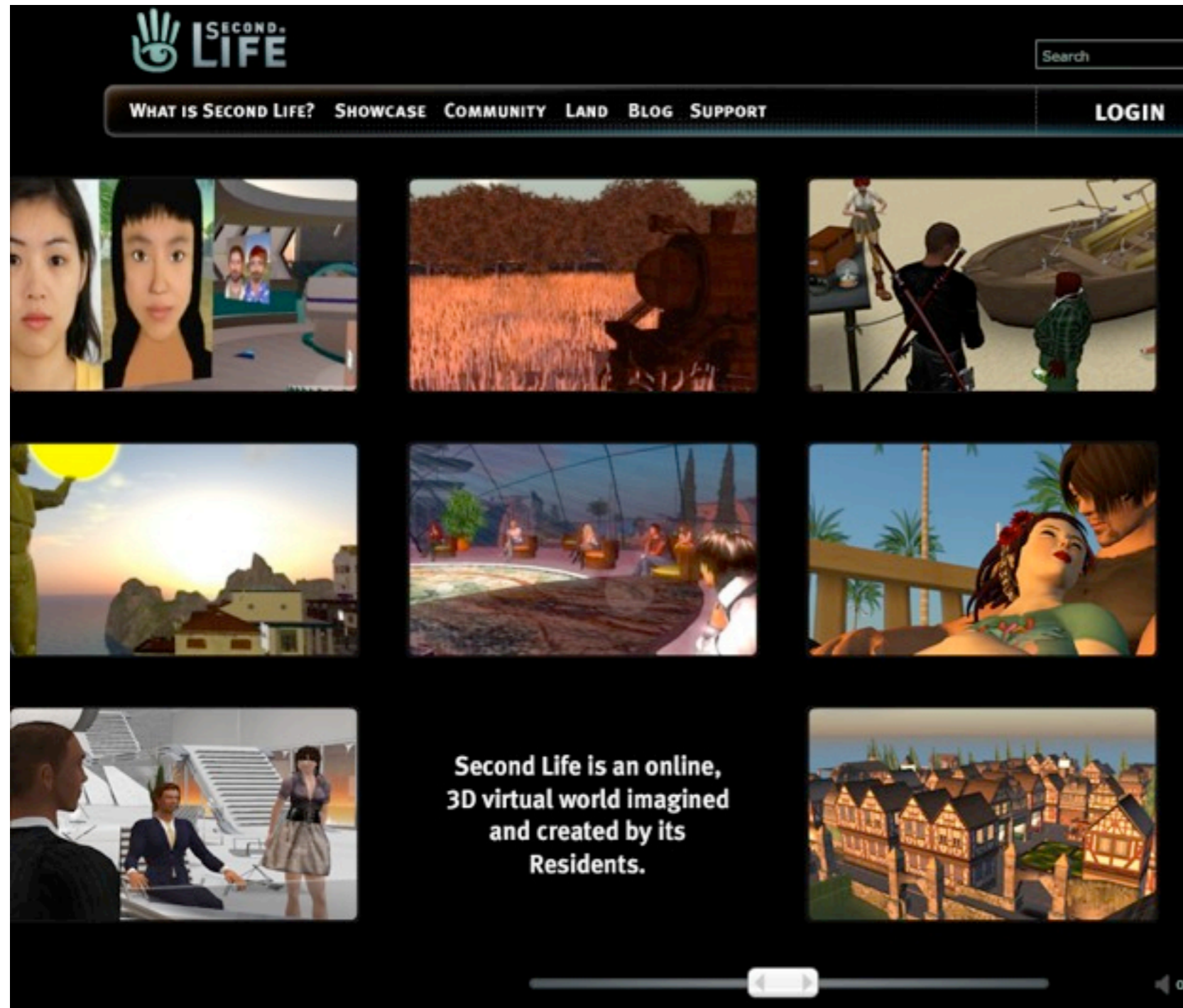
The screenshot shows the Twitter homepage. At the top, there's a 'What is Twitter?' section with a sign-in form. Below that, there's a map of the United States with a pink bird icon indicating a tweet location. The map is labeled 'twittervision' and shows '8 new tweets'.

The screenshot shows the FoxyTunes website for the artist Björk. It features a search bar, a list of albums and tracks, and a music player interface. The website is designed to provide a comprehensive music experience for the user.

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On-line Games and Virtual Communities



Social Entertainment

The screenshot shows the Swoopo website header with the logo, navigation links (Home, My Swoopo, Help, Register), and a login form. Below the header is a large banner for kitchenware. The banner features a kitchen scene with a stand mixer, knives, and vegetables. Text on the banner includes "Starting NOW", "CALPHALON, HENCKELS & KITCHENAID", and "REGISTER NOW FOR FREE BUY BIDS AND BID WITHOUT RISK!". A button labeled "Browse Kitchenware" is also present.

The screenshot displays a section titled "Bid now - these auctions are about to end" with five auction cards. Each card shows the item name, a timer, the current bid amount, and a "BID" button.

Item	Timer	Current Bid	User
300 Bids Voucher	00:00:18	\$117.90	Nirajzala
MySims Agents (Nintendo DS)	00:02:05	\$0.24	Bb4kids
Samsung UN46B6000 46-Inch 1080p LED HDTV	00:00:15	\$102.00	Julia30
Wii Nintendo Console + Wii Sports	00:00:15	\$32.04	Bearboy66
Apple MacBook Pro MB991LL/A 13.3-Inch Laptop	00:45:27	\$12.42	Jamesham



Social Recommendations

Genius Recommendations for Apps NEW

There are tens of thousands of apps in the App Store, with more added every day. A new feature of iPod touch makes finding cool new apps even easier. It's Genius for apps, and it works just like Genius for your music. Tap the Genius icon and get recommendations for apps that you might like based on apps you and others have downloaded.

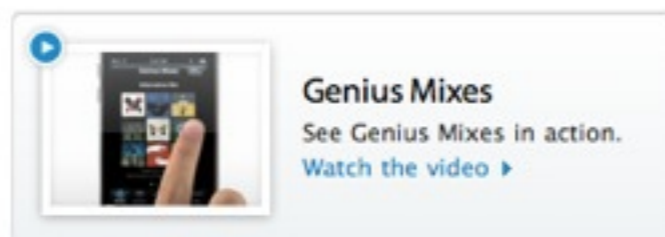


Genius Playlists

Say you're listening to a song you really like and want to hear other tracks that go great with it. The Genius feature finds other songs on your iPod touch that sound great with the one you were listening to and makes a Genius playlist for you. Listen to the playlist right away, save it for later, or even refresh it and give it another go. Count on Genius to create a mix you wouldn't have thought of yourself.

Genius Mixes NEW

Now the Genius feature is even more powerful. Introducing Genius Mixes. All you do is sync iPod touch to iTunes, and Genius automatically searches your library to find songs that sound great together. Then it creates multiple mixes you'll love. These mixes are like channels programmed entirely with your music.



Social Knowledge Sharing

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Die freie Enzyklopädie
718 000+ Artikel

Français
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フリー百科事典
474 000+ 記事

Nederlands
De vrije encyclopedie
414 000+ artikelen

Español
La enciclopedia libre
339 000+ artículos

Svenska
Den fria encyklopedin
277 000+ artiklar

Polski
Wolna encyklopedia
477 000+ hasel

Italiano
L'enciclopedia libera
421 000+ voci

Português
A enciclopédia livre
364 000+ artigos

search · suche · rechercher · szukaj · 検索 · ricerca · zoeken · busca
buscar · sök · поиск · 搜索 · søk · haku · suk · cerca · căutare · ara

English

KNOL™
BETA

Welcome to Knol

Share what you know

Write and post a knol (nōl) — a unit of knowledge.

Create
easy to write and manage

Control
each knol is owned by you, the author

Search
searchable through popular search engines



Social/Human Computation

Security Check: Enter both words below, separated by a space. What's This?
Can't read this? Try another.
Try an audio captcha



Text in the box:

I have read and agree to the Terms of Use and Privacy Policy

Sign Up

Problems signing up? Check out our help pages

Security Check: Enter both words below, separated by a space. What's This?
Can't read this? Try another.
Try an audio captcha



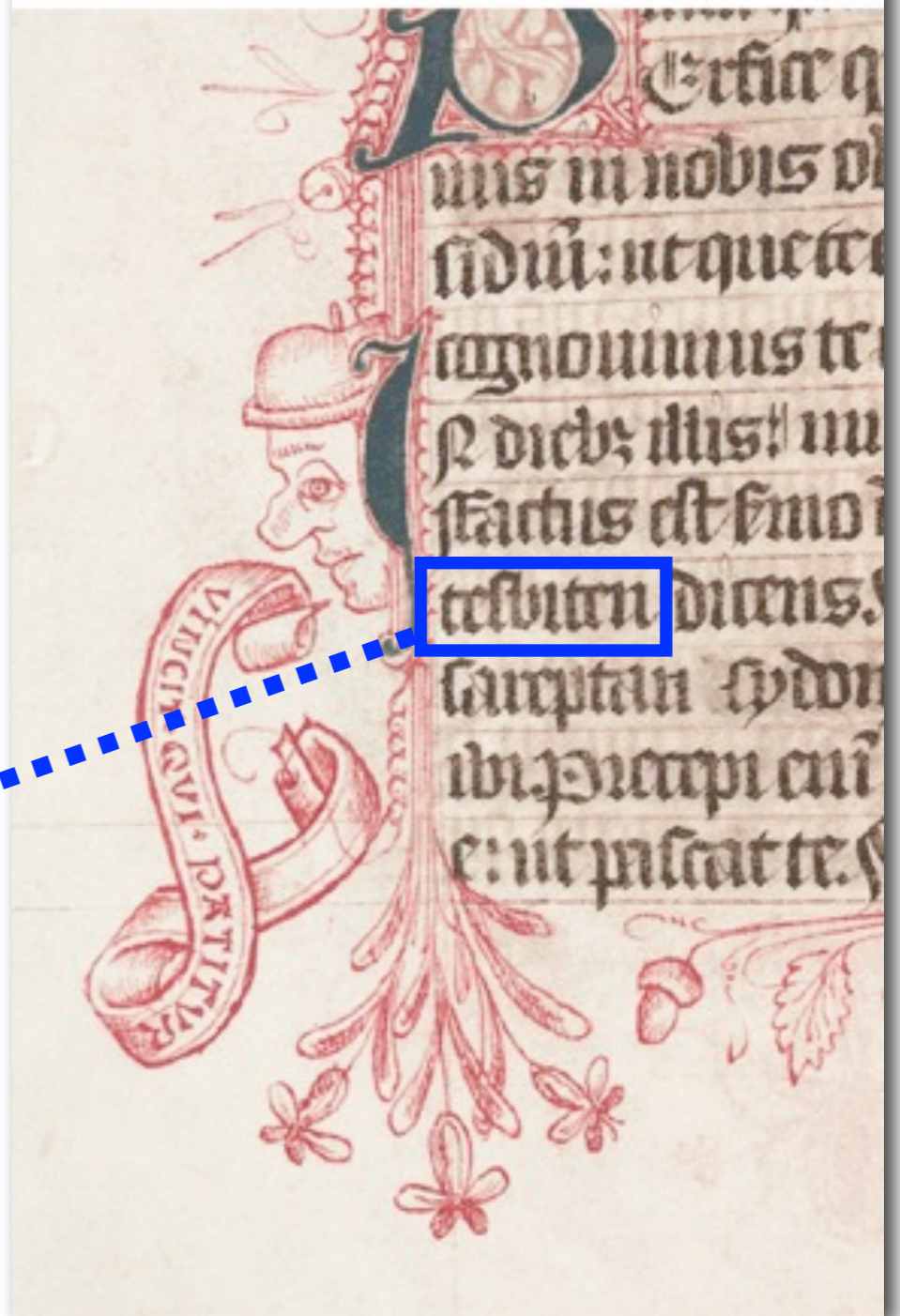
Text in the box:

I have read and agree to the Terms of Use and Privacy Policy

Sign Up

Problems signing up? Check out our help pages

MS. Don. b. 6, fol. 48v (detail) © Bodleian Library, University of Oxford

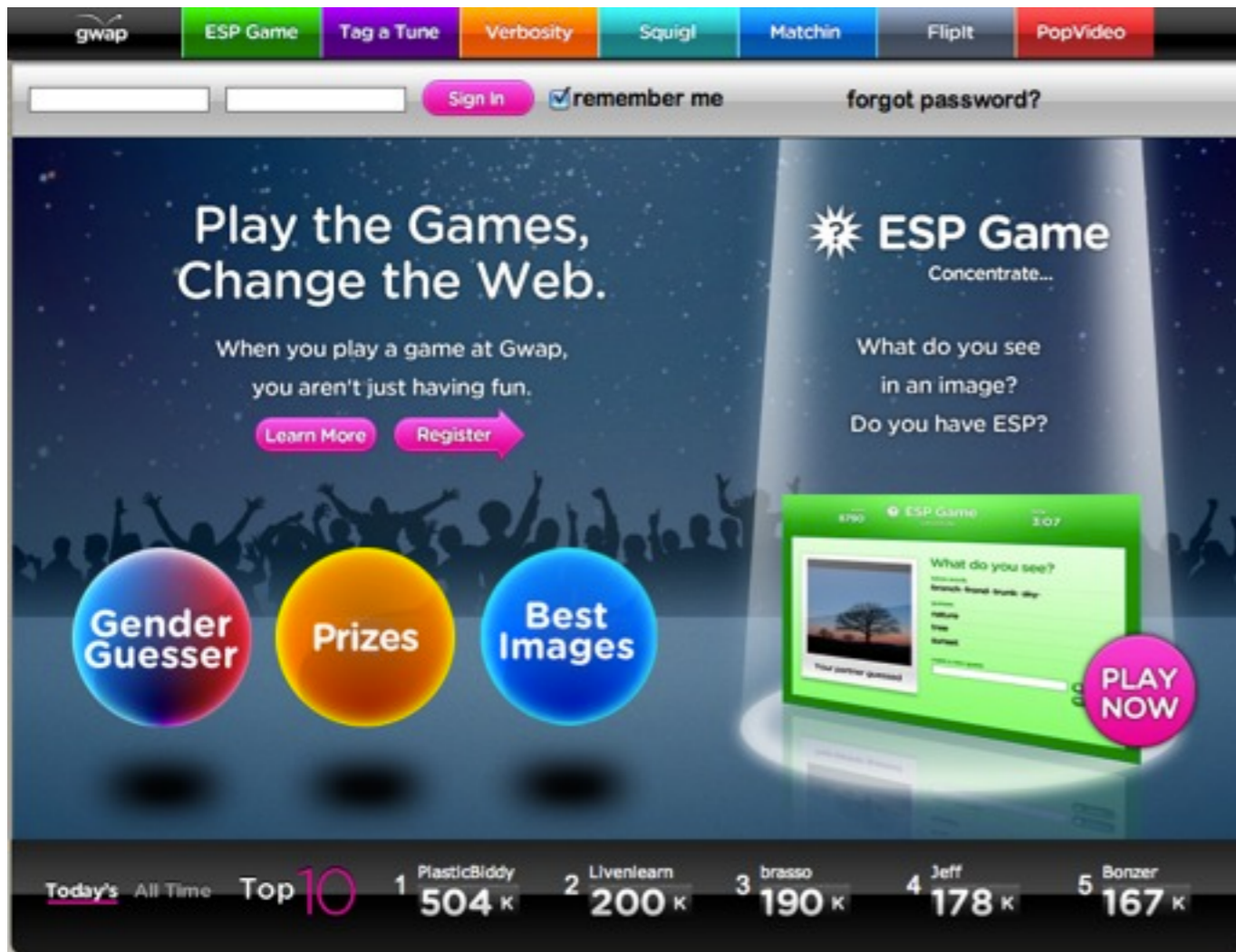


Human Computation

The screenshot shows the Google Image Labeler interface. At the top left is the Google logo with 'Image Labeler BETA' and 'Google Image Labeler' text. On the top right are links for 'Help' and 'Sign In'. On the left side, there is a scorecard with 'time left' at 01:17, 'score' at 0, and 'passes' at 0. In the center, there is a text input field with a 'label' button and a 'pass' button. Below the input field, it says 'Your partner has suggested 10 labels.' A large image of a lake and mountains is displayed in the center. Below the image is a 'zoom out' button. On the right side, there are two sections: 'off-limits' with labels 'sky', 'water', 'blue', 'lake', and 'mountain', and 'my labels' which is currently empty. Red starburst shapes are overlaid on the interface, highlighting the input field, the scorecard, the 'off-limits' list, and the 'my labels' section.



Games With A Purpose (GWAP)



- **ESP**
 - Image tagging
- **Tag a Tune**
 - Song tagging
- **Verbosity**
 - Database of common knowledge description
- **Squigl**
 - Image segmentation
- **Matchin**
 - Image search by aesthetic value
- **Flipt**
 - Finding similar image pairs
- **PopVideo**
 - Video tagging



Crowdsourcing

amazonmechanical turk
Artificial Intelligence

Your Account

HITs

Qualifications

Already have an account?
Sign in as a [Worker](#) | [Requester](#)

[Introduction](#) | [Dashboard](#) | [Status](#) | [Account Settings](#)

Mechanical Turk is a marketplace for work.

We give businesses and developers access to an on-demand, scalable workforce. Workers select from thousands of tasks and work whenever it's convenient.

110,262 HITs available. [View them now.](#)

Make Money by working on HITs

HITs - *Human Intelligence Tasks* - are individual tasks that you work on. [Find HITs now.](#)

As a Mechanical Turk Worker you:

- Can work from home
- Choose your own work hours
- Get paid for doing good work



Get Results from Mechanical Turk Workers

Ask workers to complete HITs - *Human Intelligence Tasks* - and get results using Mechanical Turk. [Register Now](#)

As a Mechanical Turk Requester you:

- Have access to a global, on-demand, 24 x 7 workforce
- Get thousands of HITs completed in minutes
- Pay only when you're satisfied with the results



Foldit: Protein Folding Game

foldit BETA
Solve Puzzles for Science

00:33:18 GMT

[BLOG](#) [PUZZLES](#) [GROUPS](#) [PLAYERS](#) [RECIPES](#) [CONTESTS](#)
[FEEDBACK](#) [FORUM](#) [WIKI](#) [FAQ](#) [ABOUT](#) [CREDITS](#)

The Science Behind Foldit

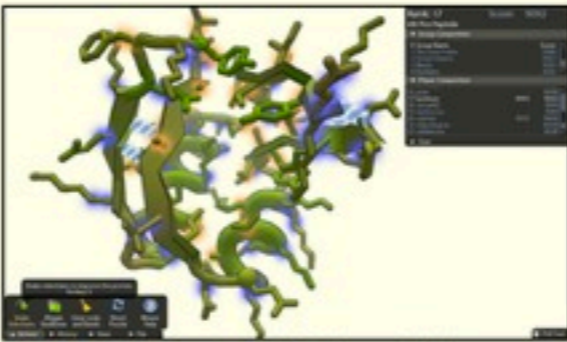
Foldit is a revolutionary new computer game enabling *you* to contribute to important scientific research. This page describes the science behind Foldit and how your playing can help.

Page Contents:

- [What is protein folding?](#)
- [Why is this game important?](#)
- [News Articles about Foldit](#)
- [Rosetta@Home Screensaver](#)

What is protein folding?

What is a protein? Proteins are the workhorses in every cell of every living thing. Your body is made up of trillions of cells, of all different kinds: muscle cells, brain cells, blood cells, and more. Inside those cells, proteins are allowing your body to do what it does: break down food to power your muscles, send signals through your brain that control the body, and transport nutrients through your blood. Proteins come in thousands of different varieties, but they all have a lot in common. For instance, they're made of the same stuff: every protein consists of a long chain of joined-together amino acids.



Folded up Puzzle 48 (+) [Enlarge This Image](#)

RECOMMEND FOLDIT

GET STARTED: DOWNLOAD

[Win Beta](#) [Mac Beta](#) [Linux Beta](#)

Win XP/Vista Intel OS X 10.4 or later Linux

USER LOGIN

Username: *

Password: *

- [Create new account](#)
- [Request new password](#)
- [Sign in using Facebook](#)

[Cooper et al, Nature 466, 756-760 (5 August 2010)]



Social Location-based Services

The image displays two overlapping web interfaces. The top interface is Foursquare, featuring a search bar with the text "Find places, people, tags" and a "SEARCH" button. Below the search bar is a blue banner with the text "CHECK-IN FIND YOUR FRIENDS UNLOCK YOUR CITY". A navigation menu includes "HOME", "FIND A PERSON", "MOBILE APPS", and "ADVERTISE WITH US". A "RECENT ACTIVITY" section lists users like "elysabeth g." and "Charlotte P." who have unlocked badges. The bottom interface is Yelp, with a search bar for "Business Name or Category" and "Berkeley, CA". It features a "Find a Business" section with "By Name" and "By Phone Number" options, and a "Discover Berkeley, CA" section with a photo of a roasted turkey. A weather widget for Berkeley, CA shows "Today" with a high of 56°F and low of 49°F, "Saturday" with a high of 52°F and low of 45°F, and "Sunday" with a high of 52°F and low of 41°F. An advertisement for "Thanksgiving to Go" is also visible, along with a "LAST CHANCE" offer to win \$25,000 for a favorite movie theater.



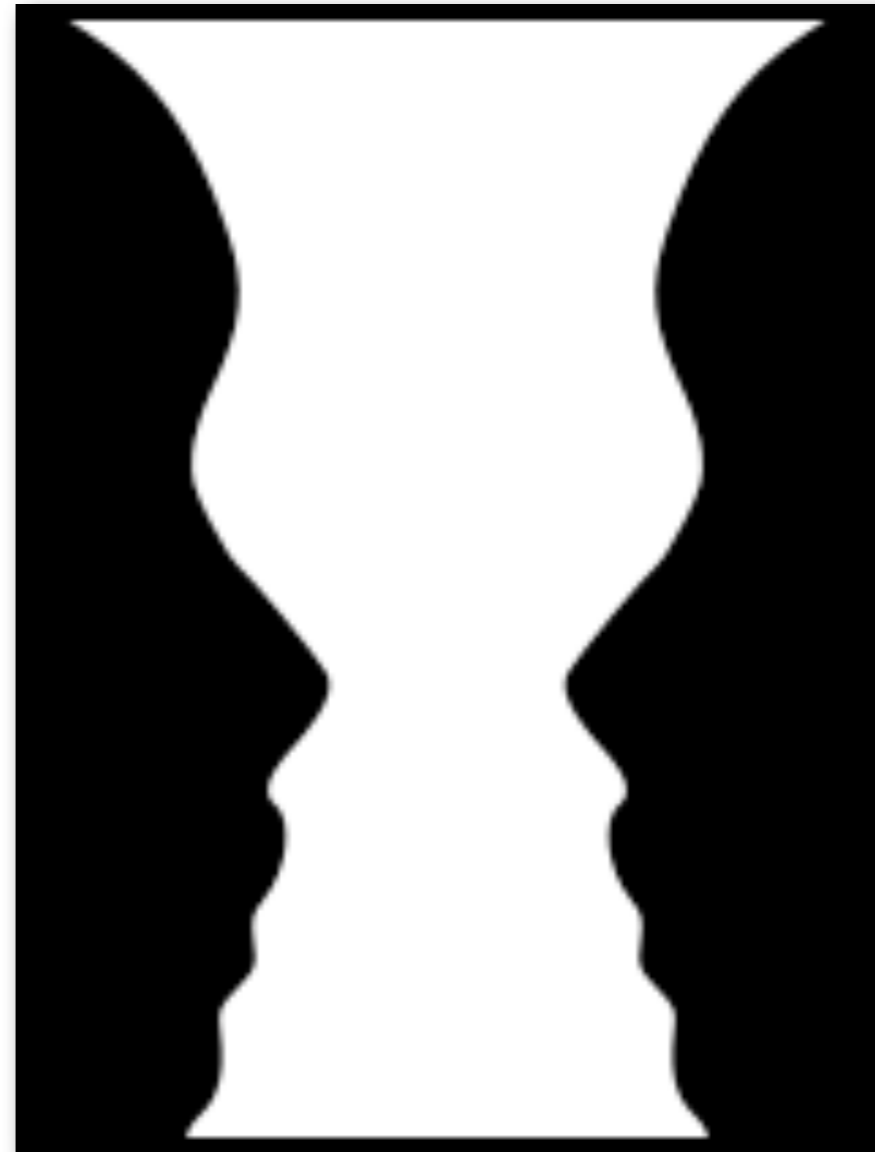
Web 2.0 Revolution

- **Glocalization**-think globally and act locally!
- **Weblication**-Web is the application!
- Three C's

Connectivity

Collaboration

Communities

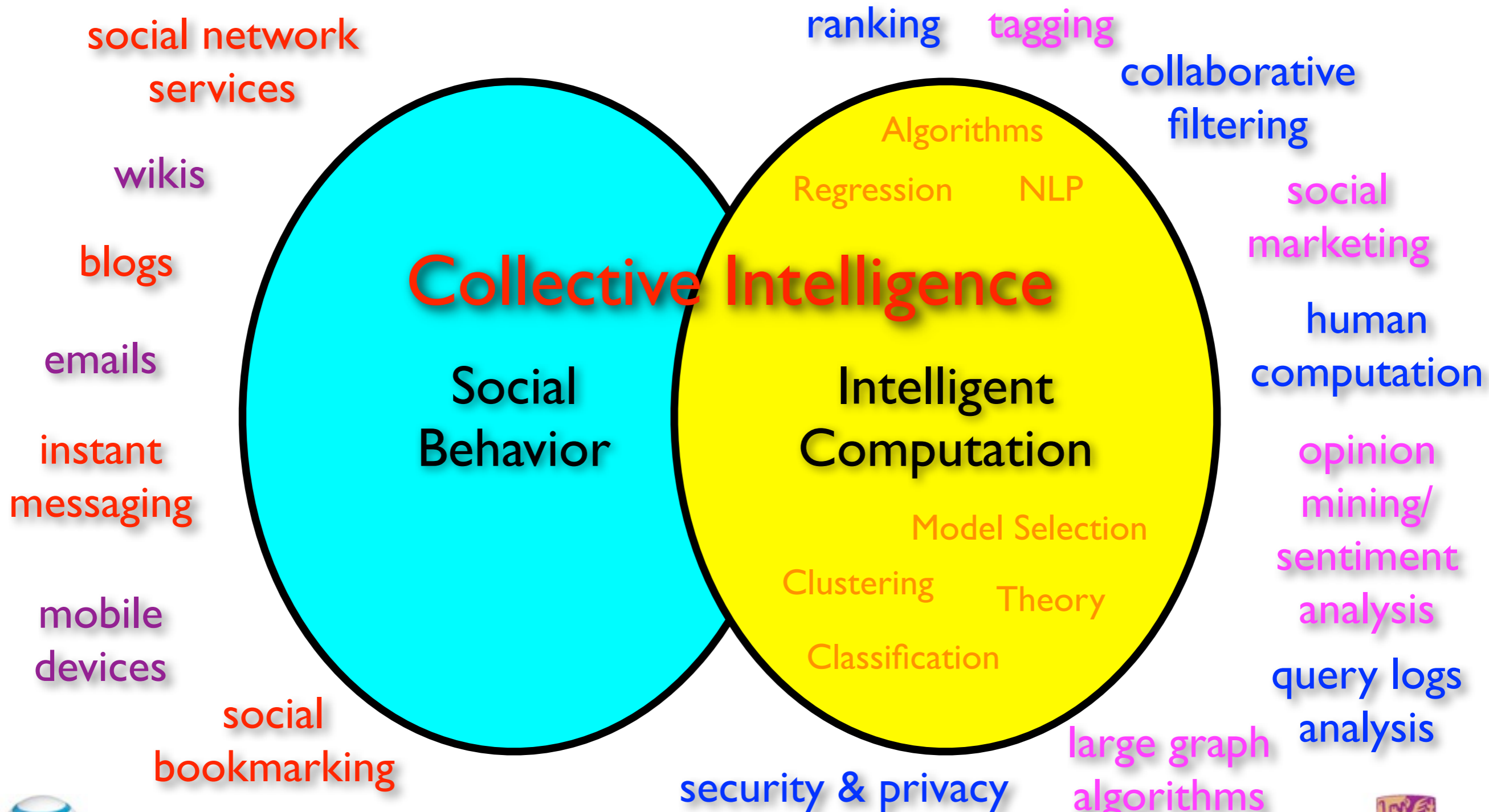


Social Relations

presence
identity
social role
reputation
expertise
trust
ownership
accountability
knowledge
crew
teams
populations
binary
cardinal
integer
real
squad
organizations
cohort
markets
communities
partners
groups



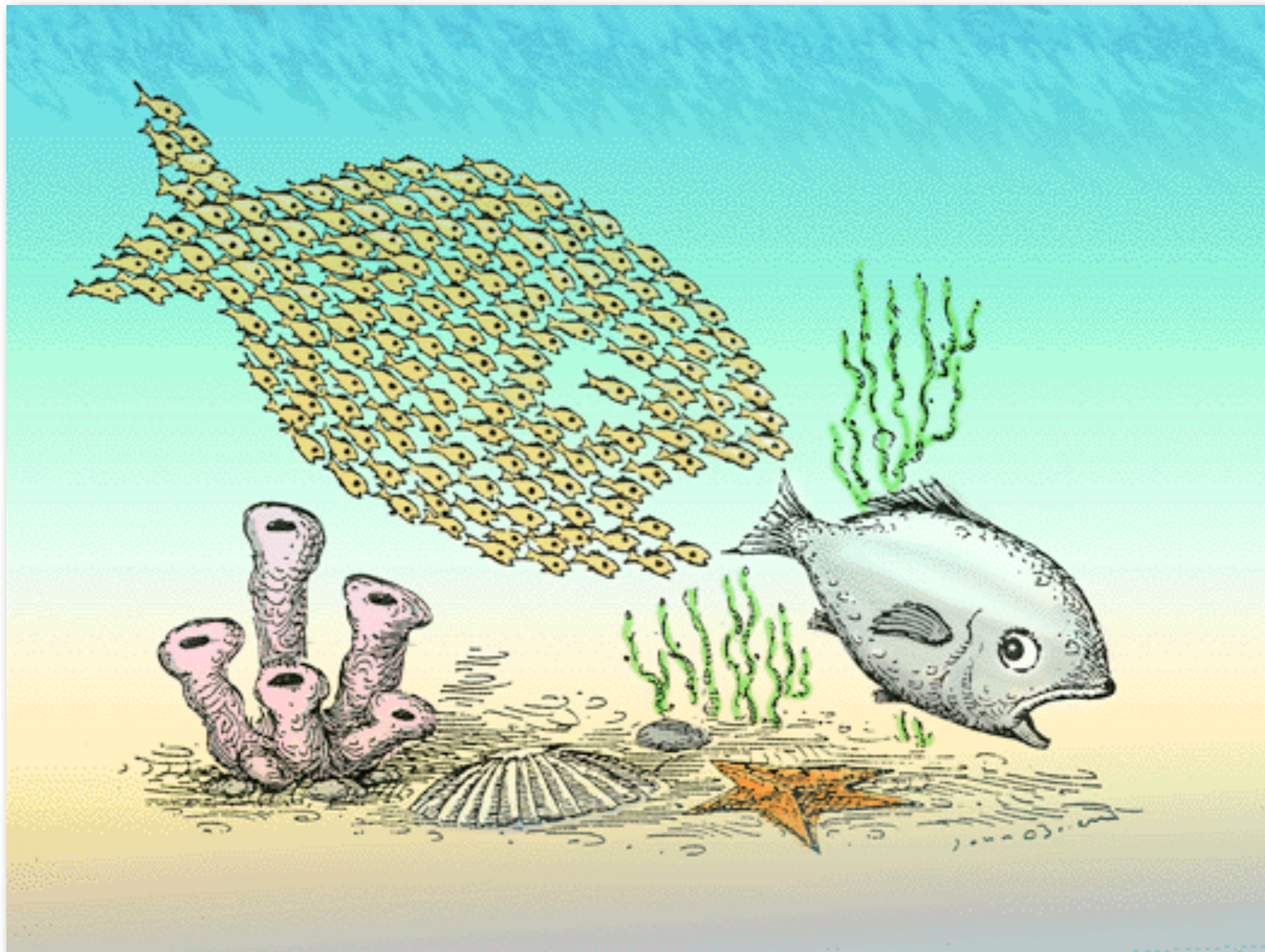
Social Computing



Definition of Social Computing [wiki]

- Any Computer-mediated communication and interaction
- In the weaker sense: **supporting any sort of social behavior**
 - blogs, email, instant messaging, wiki, social network services, social bookmarking
- In the stronger sense: **supporting “computations” that are carried out by a group of people**
 - collaborative filtering, online auctions, prediction markets, reputation systems, tagging, verification games





Introduction to Social Computing, Irwin King, 2010 EIT PhD School: Cloud Computing, Service Computing & Social Networks, November 23-27, 2010, Brisbane, Australia



On-Going Research

Machine Learning

- Smooth Optimization for Effective Multiple Kernel Learning ([AAAI'10](#))
- Online Learning for Multi-Task Feature Selection ([CIKM'10](#))
- Simple and Efficient Multiple Kernel Learning By Group Lasso ([ICML'10](#))
- Online Learning for Group Lasso ([ICML'10](#))
- Heavy-Tailed Symmetric Stochastic Neighbor Embedding ([NIPS'09](#))
- Adaptive Regularization for Transductive Support Vector Machine ([NIPS'09](#))
- Direct Zero-norm Optimization for Feature Selection ([ICDM'08](#))
- Semi-supervised Learning from General Unlabeled Data ([ICDM'08](#))
- Learning with Consistency between Inductive Functions and Kernels ([NIPS'08](#))
- An Extended Level Method for Efficient Multiple Kernel Learning ([NIPS'08](#))
- Semi-supervised Text Categorization by Active Search ([CIKM'08](#))
- Transductive Support Vector Machine ([NIPS'07](#))
- Global and local learning ([ICML'04](#), [JMLR'04](#))



On-Going Research

Web Intelligence/Information Retrieval

- Routing Questions to Appropriate Answerers in Community Question Answering Services ([CIKM'10](#))
- Diversifying Query Suggestion Results ([AAAI'10](#))
- A Generalized Co-HITS Algorithm and Its Application to Bipartite Graphs ([KDD'09](#))
- Entropy-biased Models for Query Representation on the Click Graph ([SIGIR'09](#))
- Effective Latent Space Graph-based Re-ranking Model with Global Consistency ([WSDM'09](#))
- Formal Models for Expert Finding on DBLP Bibliography Data ([ICDM'08](#))
- Learning Latent Semantic Relations from Query Logs for Query Suggestion ([CIKM'08](#))
- RATE: a Review of Reviewers in a Manuscript Review Process ([WI'08](#))
- MatchSim: link-based web page similarity measurements ([WI'07](#))
- Diffusion rank: Ranking web pages based on heat diffusion equations ([SIGIR'07](#))
- Web text classification ([WWW'07](#))



On-Going Research

Recommender Systems/ Collaborative Filtering

- Recommender Systems with Social Regularization ([WSDM'11](#))
- CMAP: Effective Fusion of Quality and Relevance for Multi-criteria Recommendation ([WSDM'11](#))
- UserRec: A User Recommendation Framework in Social Tagging Systems ([AAAI'10](#))
- Learning to Recommend with Social Trust Ensemble ([SIGIR'09](#))
- Semi-Nonnegative Matrix Factorization with Global Statistical Consistency in Collaborative Filtering ([CIKM'09](#))
- Recommender system: accurate recommendation based on sparse matrix ([SIGIR'07](#))
- SoRec: Social Recommendation Using Probabilistic Matrix Factorization ([CIKM'08](#))

Human Computation

- Collection of User Judgments on Spoken Dialog System with Crowdsourcing ([SLT'10](#))
- A Survey of Human Computation Systems ([SCA'09](#))
- Mathematical Modeling of Social Games ([SIAG'09](#))
- An Analytical Study of Puzzle Selection Strategies for the ESP Game ([VI'08](#))
- An Analytical Approach to Optimizing The Utility of ESP Games ([VI'08](#))



Emerging Issues

- **Theory** and models
- **Search, mining, and ranking** of existing information, e.g., **spatial** (relations) and **temporal** (time) domains
- Dealing with **partial** and **incomplete** information, e.g., collaborative filtering, ranking, tagging, etc.
- **Scalability** and **algorithmic** issues
- **Security, privacy, trust, and risk** issues
- **Monetization** of social interactions
- Service-based software **platforms** and development **tools**



WSDM2011

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Fourth ACM International Conference
on Web Search and Data Mining

9-12 February 2011
Hong Kong



WSDM2011

WSDM (pronounced "wisdom") is the premier international ACM conference covering research in the areas of search and data mining on the Web. The 4th ACM WSDM Conference will take place in Hong Kong, during February 9-12, 2011.

WSDM publishes original, high quality papers and presentations related to search and data mining on the Web and the Social Web, with an emphasis on practical but principled novel models of search, retrieval and data mining, algorithm design and analysis, economics implications, and in-depth experimental analysis of accuracy and performance.

Breaking News

QUICK LINKS

- [Workshop Information](#)

IMPORTANT DATES

- | | |
|--------|---------------------------------------|
| Jul-25 | Workshop-proposals |
| Aug-1 | Paper-submission |
| Aug-23 | Workshop-notification |
| Sep-1 | Tutorial-proposals |
| Oct 15 | Paper notification |

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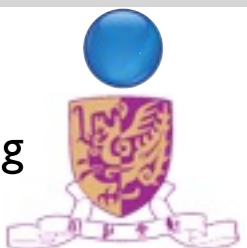
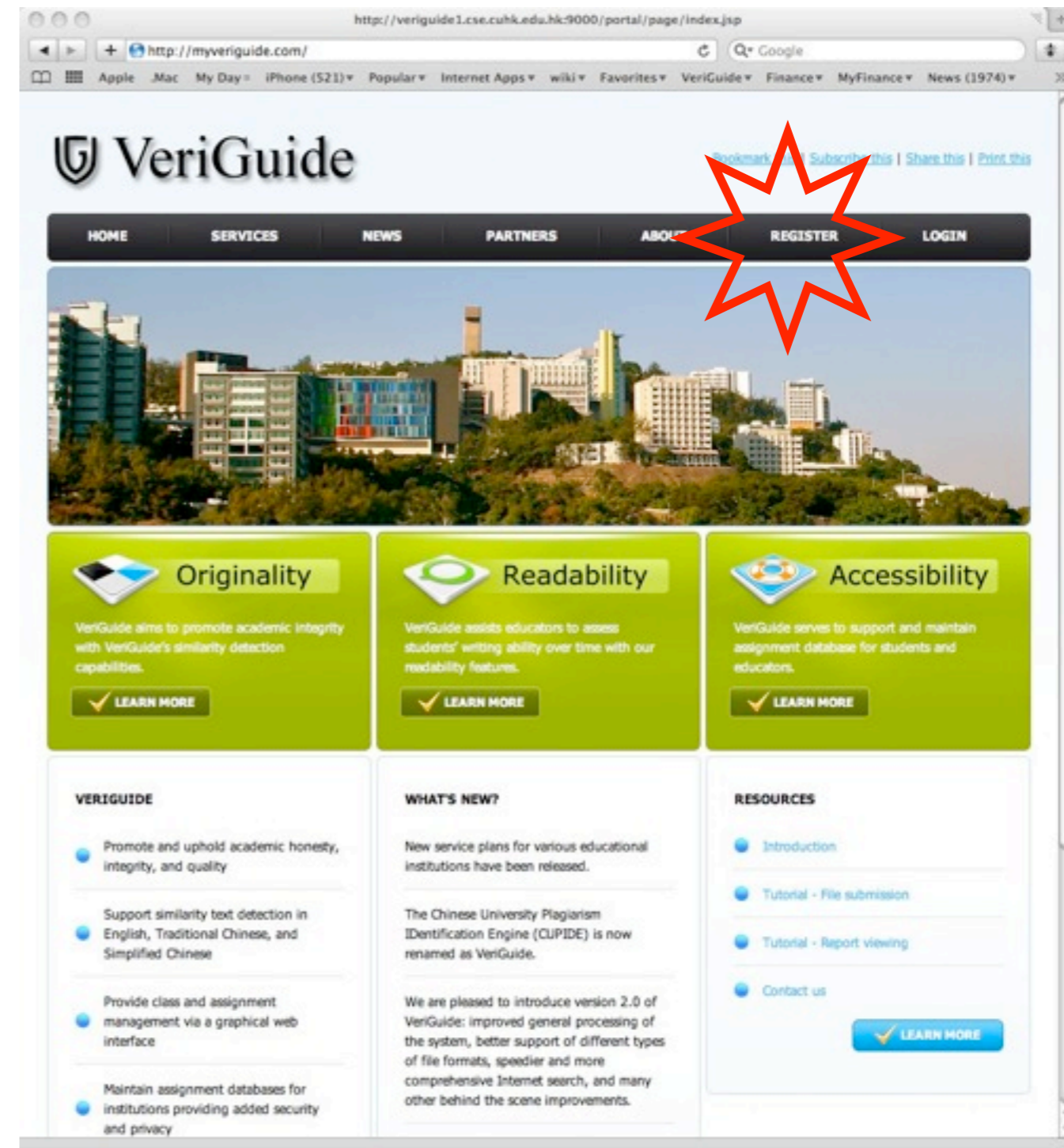


Introduction to Social Computing, Irwin King, 2010 ELL PhD School: Cloud Computing, Service Computing & Social Networks, November 23-27, 2010, Brisbane, Australia



VeriGuide

- **Similarity text** detection system
- Developed at **CUHK**
- Promote and uphold academic **honesty, integrity, and quality**
- Support **English, Traditional and Simplified Chinese**
- Handle **.doc, .txt, .pdf, .html,** etc. file formats
- Generate detailed **originality report** including **readability**



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"I don't care about 'Six Degrees of Kevin Bacon.'
I'm one degree away from a pork chop."



Q & A



Introduction to Social Computing, Irwin King, 2010 EII PhD School: Cloud Computing, Service Computing & Social Networks, November 23-27, 2010, Brisbane, Australia

