



# Location (place & space)

CS3107

Lecture 7

Shawn Day



# 2

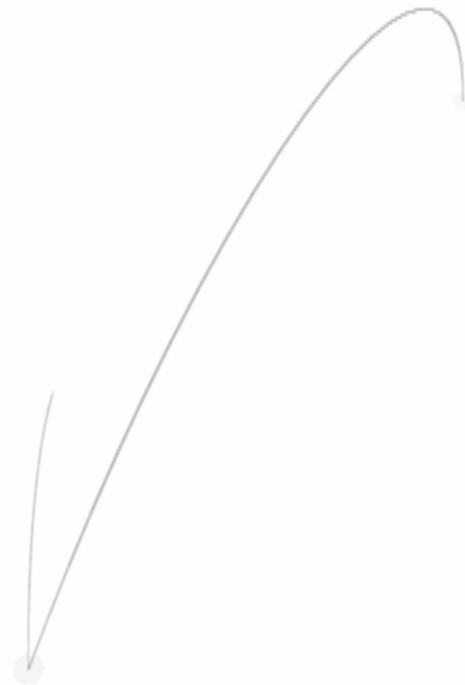
## Feeding Back

- Exploring Location/LBS and GeoSocial



Place





Every phone call builds a connection between two places.

Aggregating all phone calls for an entire country reveals the connections between all places.



Space



# What is Geolocation?

The use of sensors and cues to computationally deduce the geographic location of a party or a device



## How Location Based Services Work

Cell Tower  
Triangulation



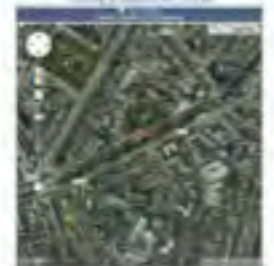
Global  
Positioning  
System



Wifi  
Triangulation



IP Address  
Approximation



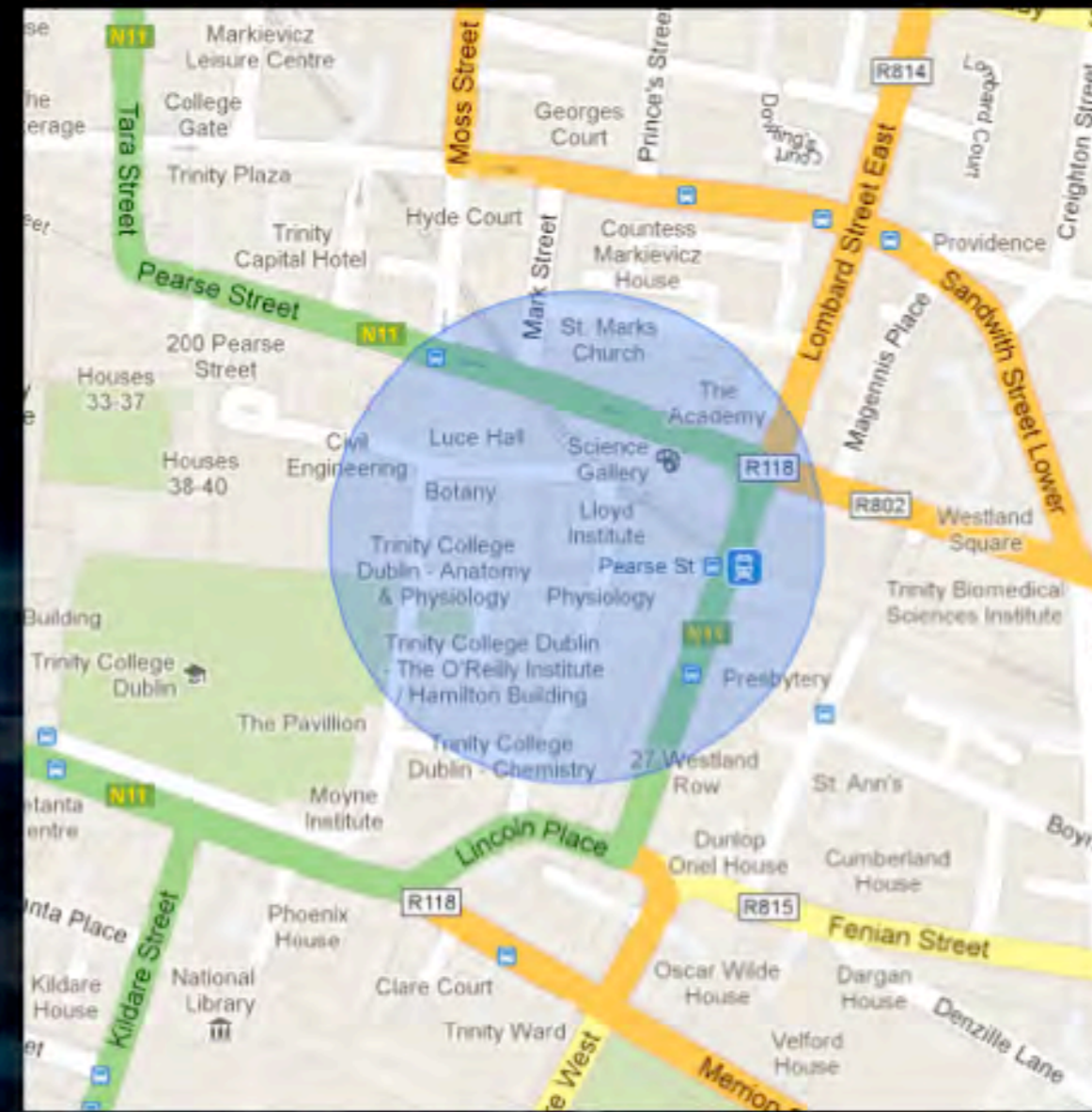
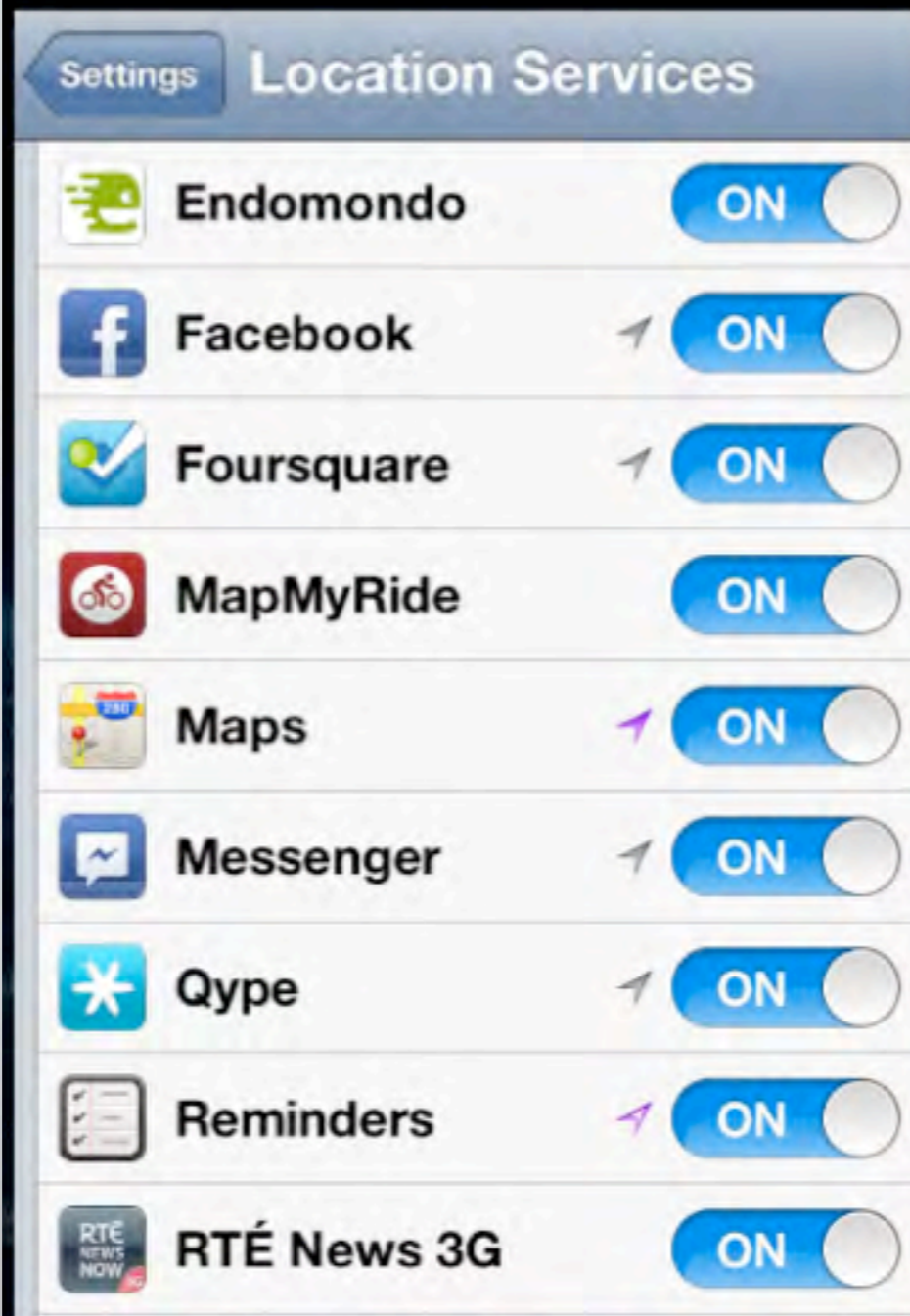


# Four Geolocation Trends

- Check-Ins --> Challenges and Experiences
- Locational Based Services + Mobile Payments
- Increasing Accuracy
- Geofencing and Containment



# iPhone Location Services Options





# Terms

- GeoTagging
- Predictive: Future Location
- Urban Sensing
- Geofencing



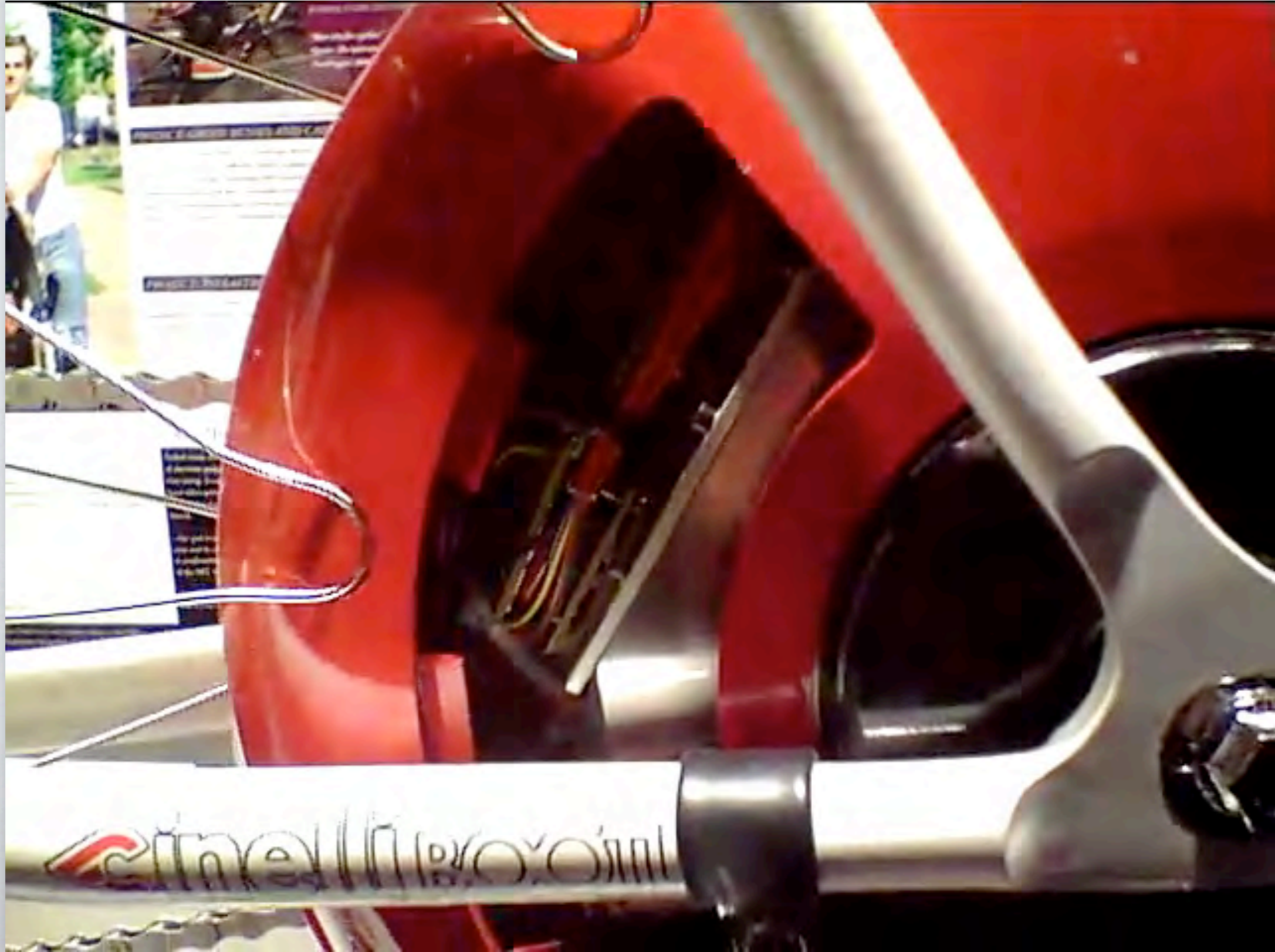
# Datasources: Making a Location

- Primary
    - IP Address --- Assignment
    - MAC Address
  - Image metadata
  - Credit card information
  - GPS feedback
  - Co-Locate
  - Observed and Reported
- Tagged



# P3 Systems

- P-P-P Person-Person-Place
- P3-Systems can strengthen community by helping individuals leverage location information to make new social ties and to coordinate better the interactions with colleagues, friends, and family to reinforce existing social ties



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**Trash Tag Ver 2.0**



# Some of the Players

- Foursquare
- Gowalla
- Google Latitude
- Facebook Places
- Yelp
- wiktitude
- Layar
- Triplt/Dopplr
- Loopt
- whereyougonnabe



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# foursquare

- Launched 2009
- Location Based Social Networking
- Check In and Rewards
- Gaming - Mayorship - API
- Reviews and Ratings
- 25M Users
- 2.5B Check-Ins

foursquare

Me History Badges Stats Friends



It's more fun with friends!

FIND FRIENDS

Shawn Day, Peter Organiściak and 8 friends have connected to Foursquare.



Hi Shawn Day

Dublin,

Last seen 3 hours ago at: [Ely Wine Bar](#) [off the grid]

Friends' Recent Check-ins



Roland Nine @ [geoDealio](#) @ [NDRC Launchpad](#)

Crane street - 2 hours ago

# Gowalla :-)

The screenshot shows the Gowalla website homepage. At the top, there is a navigation bar with the Gowalla logo, links for Home, Spots, and Trips, a search bar labeled "Search People and Places", and links for Blog, Sign In, and a green "Join Gowalla" button. Below the navigation bar is a main heading: "Keep up with your friends, share the places you go, and discover the extraordinary in the world around you." This heading is followed by three columns of promotional content. The first column features a photo of three people and the text: "Keep up with friends on your phone. Connect with friends from Facebook and Twitter to share where you're going." The second column features a photo of the Golden Gate Bridge and the text: "Discover new places and hotspots when you go out, then share your photos, recommendations and trips with friends!" The third column features a collage of various pins and the text: "Find inspiration to explore the world around you while picking up rewards from local eateries, venues and retail stores." At the bottom of the page, there is a large orange "Sign Up Now" button, followed by the text "or [Take a Quick Tour](#) to learn more." To the right of this text are logos for Android, BlackBerry, Apple iPhone, and Palm.

**Gowalla** Home Spots Trips  Blog Sign In [Join Gowalla](#)

**Keep up with your friends, share the places you go, and discover the extraordinary in the world around you.**

**Keep up with friends on your phone.**  
Connect with friends from Facebook and Twitter to share where you're going.

**Discover new places and hotspots** when you go out, then share your photos, recommendations and trips with friends!

**Find inspiration to explore** the world around you while picking up rewards from local eateries, venues and retail stores.

[Sign Up Now](#) or [Take a Quick Tour](#) to learn more.

Android BlackBerry Apple iPhone palm



# Google Latitude

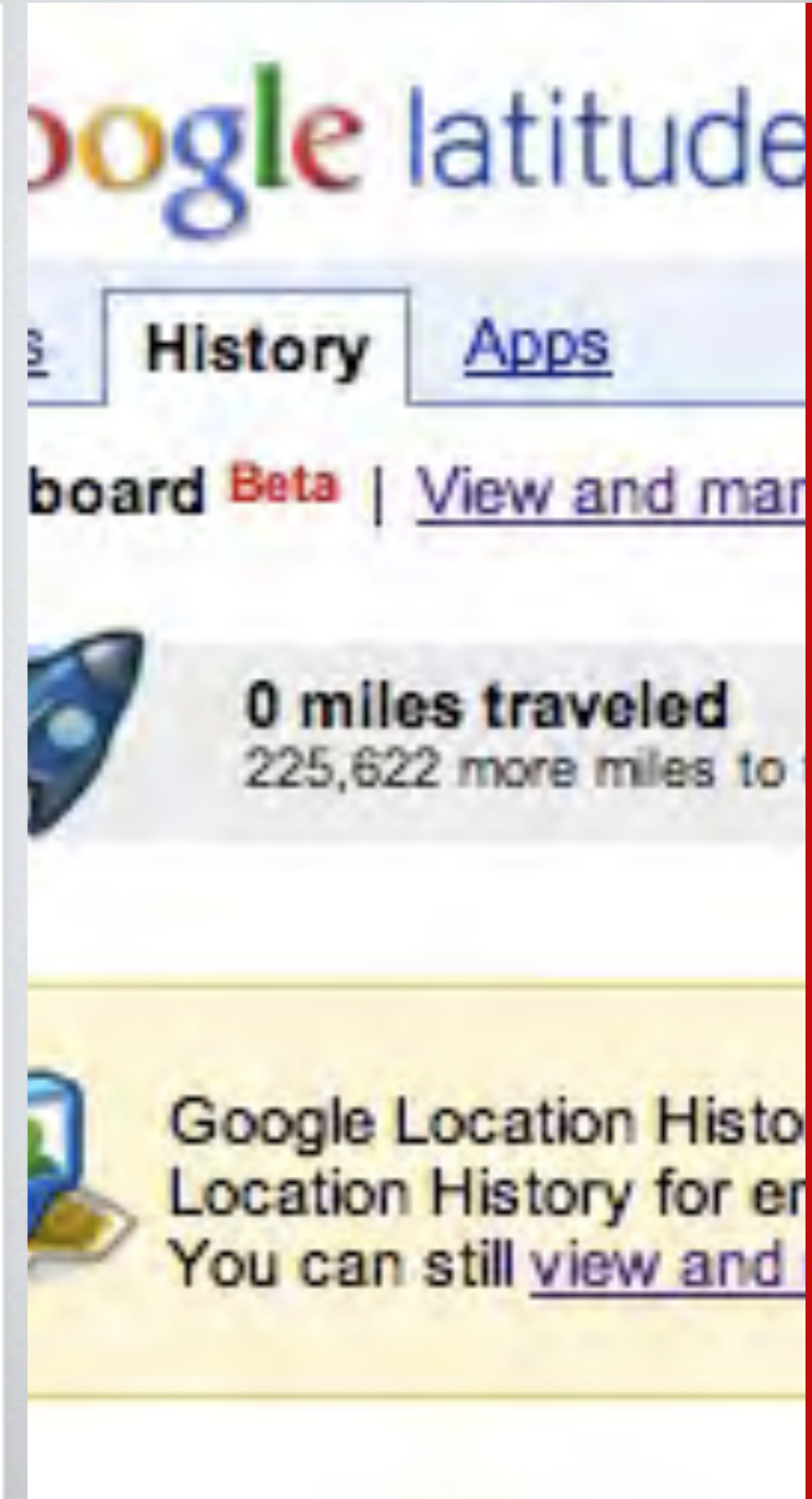
Launched in 2009

Location-Based Social Networking

Pulls from GoogleTalk

Otherwise strangely static - now integrated with G+

Gaming - Regular to Guru



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# Facebook Places

- Launched August 2010
- Attempt to move into the foursquare space?
- Check-Ins
- Option to Tag Location with Post or Picture
- Tie to Timeline, etc.
- Potential Users >1B



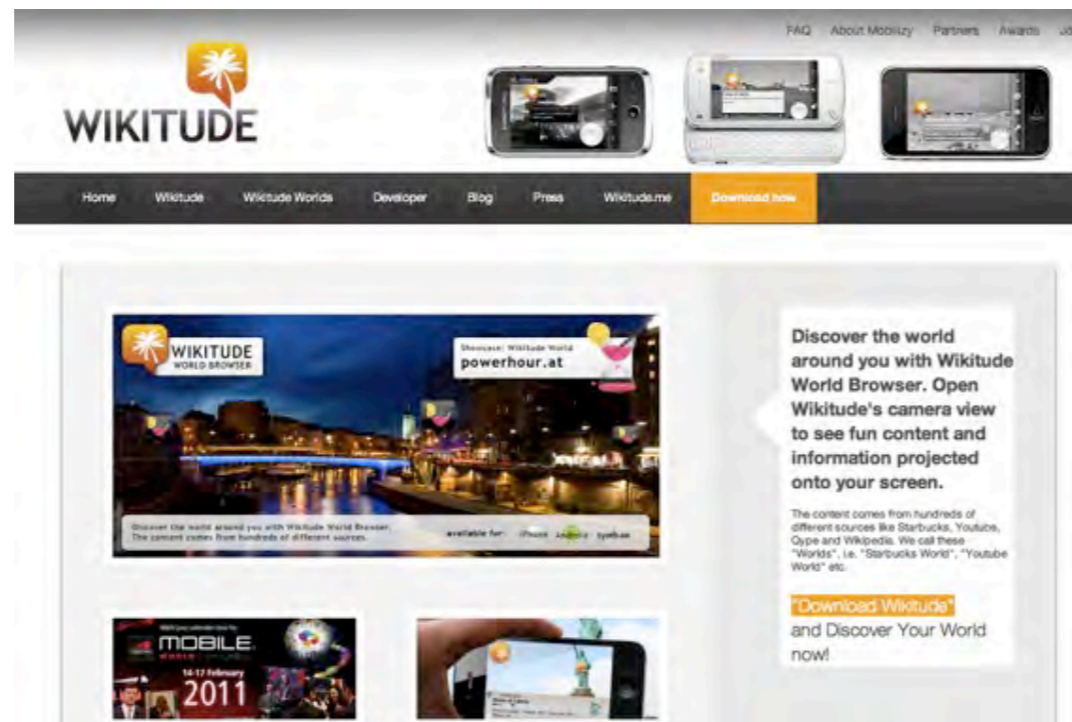
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# YELP

- Launched 2004
- Location Based Search
- Reviews and Ratings
- One of First iOS with AR
- Check Ins and Rewards
- Gaming - King and Queen
- Acquired Qype (rival)
- 84M + 33M Reviews

The screenshot shows the Yelp website interface for Dublin. At the top, there is a search bar with the text "Search for (e.g. taco, cheap dinner, Max's)" and a "Near" dropdown menu set to "Dublin". Below the search bar is a navigation menu with links for "Home", "About Me", "Write a Review", "Find Friends", "Messaging", "Talk", and "Events". A prominent yellow banner reads "Yelp is the best way to find great local businesses" with a subtext: "People use Yelp to search for everything from the city's tastiest burger to the most renowned cardiologist. What will you uncover in your neighborhood?" and a "Create Your Free Account" button. Below the banner, the "Top of Yelp: Dublin" section features a list of categories on the left: Restaurants (1,800 reviewed), Food (1,198 reviewed), Nightlife (736 reviewed), Shopping (1,729 reviewed), Pubs (501 reviewed), Bars (646 reviewed), Coffee & Tea (482 reviewed), Fashion (536 reviewed), Beauty & Spas (322 reviewed), and Local Services (226 reviewed). The main content area displays a list of top-rated restaurants in Dublin, including "1. The Brazen Head" (73 reviews), "2. The Porterhouse Temple Bar" (82 reviews), "3. Juniors" (43 reviews), and "4. Chapter One". On the right side, there is a "Review of the Day" section featuring a user profile and a "Yelp on the Go" section with images of the mobile app. At the bottom right, there is a "Popular Events" section.

# Wikitude



- Give context to location

# Layar Reality Browser

- Develop custom layers - games in real space
- See Video





### 1. Add your travel plans

Add trips on the Dopplr site or simply tell Dopplr via Twitter, email or SMS. Or import from your web-based calendar. It's easy.



NEED A HOTEL?

Smith  
Mr & Mrs Smith  
Hotel Collection

Live for less

Passionate  
about where you stay?

# Dopplr & Triplt

Mar 6 - 10, 2010 / Stockholm, Sweden

Travelers: Shawn Day

Viewers:

Planners:



Map

Sharing

Options

Print

Flight Alerts

Wed, Mar 6



Umea, Sweden: AVG: HI 0°C / LO -9°C

+ Add Plans

Worried about delays? Get Triplt Pro!



07:30

Dublin (DUB) to Stockholm (ARN)

Get the most out of Triplt

Import your trips auto-magically with Auto-Import!  
[Get Auto-Import](#)

Advertisement

EXPLORE BRITAIN  
THE 60-MILLION-ACRE



# Loopt

The screenshot shows the Loopt website homepage with a blue header bar. The header contains the Loopt logo, the tagline "Discover the world around you", and links for "Blog" and "Login". The main content area is divided into three columns: "Who's around?" with profile pictures, "What to do?" with a "Happy hour. Get over here!" message and an "Almost there!" speech bubble, and "Where to go?" with "6 friends are here right now!" and location pins. Below these columns are icons for mobile platforms: iPhone/iTouch, Android, Windows Phone 7, and BlackBerry. A "Take the tour" link and a green "Get the App" button are also present. The footer section includes a "Partner with us!" icon, a "News from Loopt" section dated February 22, 2011, and a "Today's Feature" section highlighting Loopt's ranking in the Top 100 iPhone Apps.

loopt® Discover the world around you [Blog](#) [Login](#)

Who's around? What to do? Where to go?

iPhone/iTouch Android Windows Phone 7 BlackBerry

Take the tour [Get the App](#)

**Partner with us!**

**News from Loopt**  
February 22, 2011  
Find Number Four... and Win Big Prizes  
Disney's new movie, I AM NUMBER FOUR, toll...  
[More news...](#)

**Today's Feature**  
Loopt Ranked in Top 100 iPhone Apps of All...  
Apple is counting down to the 10-billion-app  
download marker, and in the run up to the  
celebration they've posted the top all-...



# Moving into GeoSocial Networking and Marketing

- In addition to geolocation, geosocial networking extends the experience through:
  - Ad hoc networking - just in time and transient - i.e. during events
  - Foodsourcing - combining your location with interaction at a restaurant - self-service
  - Location Planning - Yelp
  - Moodsourcing - sharing mood along with location
  - Paperless ticketing - Passbook (iOS), Google Wallet, PassWallet (Droid)
  - Social Shopping



# THE NETS AND GOWALLA



**EARLY PROOF THAT GEOLOCATION  
MARKETING WILL SUCCEED**

**VAYNER MEDIA**  
WWW.VAYNERMEDIA.COM

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# Examples of Exploits

- Starbucks: \$1 National discount for Mayors
- BART: Badges for frequent users and spot discounts
- MetroNews.ca: Alerts when near reviews and editorial content
- History Channel: Historical fact when check into building of note
- Chevrolet: Check-in at airport and get a free car service



# continued...

- New Jersey Nets: Leave virtual tickets at sporting locations around town
- Kentucky Derby: Virtual pub crawl
- National Geographic: Curated Tours
- University: Mass check-in with photos
- H&M Virtual Goods: Special clothing for MyTown users when near real store



# Next Steps

- Hotels: Giving away vacant rooms to users in order to introduce new consumers to their hotel and also still profit from any other accommodations and amenities (room service, spa treatments, mini-bar).
- Destinations: The opportunity for establishments like Six Flags amusement park to give away free day-passes to hook in those who might not have come, and again profit from any other sources of revenue, including concessions, souvenirs, and games not included within the day pass.
- Fast Food Chains: Marketing a new menu item by distributing coupons / freebies to consumers who check in on a specific date within a reasonable radius of the chain's location. These limited time offer campaigns are quite common in the fast food industry and adding a geolocation strategy in addition to existing marketing efforts has the opportunity to yield great results.



# Issues



# Issues

- Privacy
- Normalisation
- Accuracy
- Political Borders - Geoblock
- Augmented Reality
- ????





## Next Week

- Personal Social Spaces
- Co-Creation of Culture
- Visitors from the Netherlands