

# I'm Italian, we don't do Ethics

Alessio Signorini  
University of Iowa

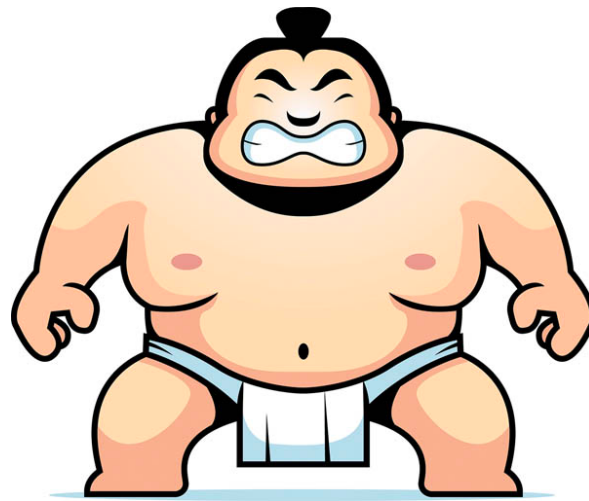


# Last Year's Talk

Use wifi to spy on people at conferences,  
monitor Twitter for everything you say,  
and record activities through apps

# This Year's Talk

## Ethics



It all stars with People





“ I am a **simple guy**, I have

(1) a truck

(2) a dog

(3) a girlfriend

I'm happy. My daughter

**does email for me**

”

With great power  
comes great responsibility

(Spiderman's uncle)



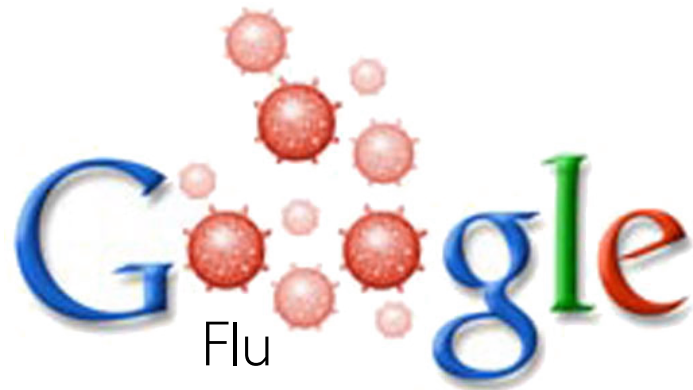
Edward Snowden  
got the NSA in trouble

“INTLOVE”  
Use of NSA resources  
to spy on love interests



Enjoy Responsibly

# Search Logs / Web History



ILI% and Epidemics Monitoring

## Medical Conditions

(e.g., search for herpes)

## Drug Abuse

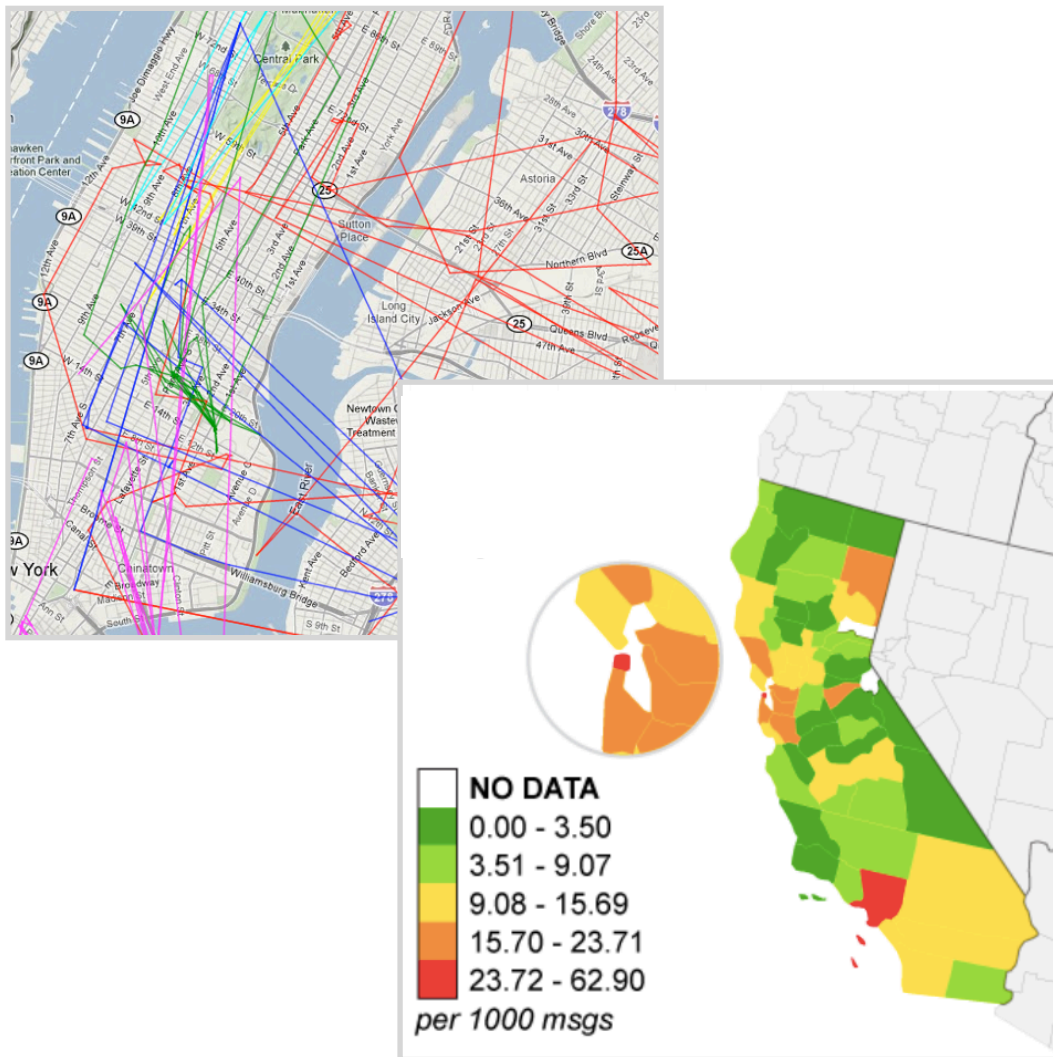
(e.g., online pharmacies)

## BMI

(e.g., non-healthy tweets)



# Checkins / Activities



Travel Models and Statistics

Away from Home

(thieves could like that)

Bar Hopping

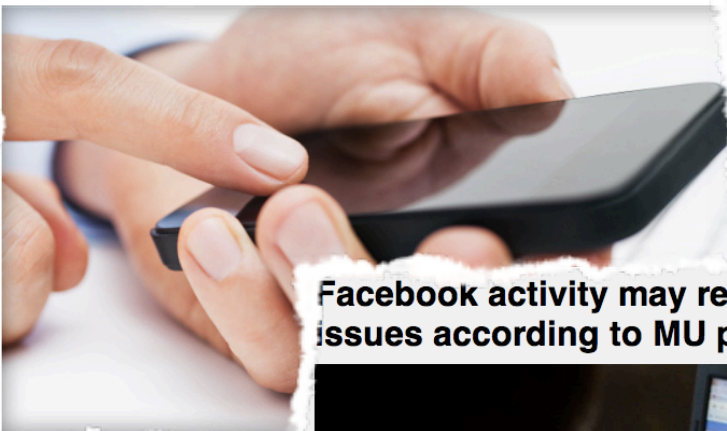
(e.g., 4 nights out in a week)

Poor Eating Choices

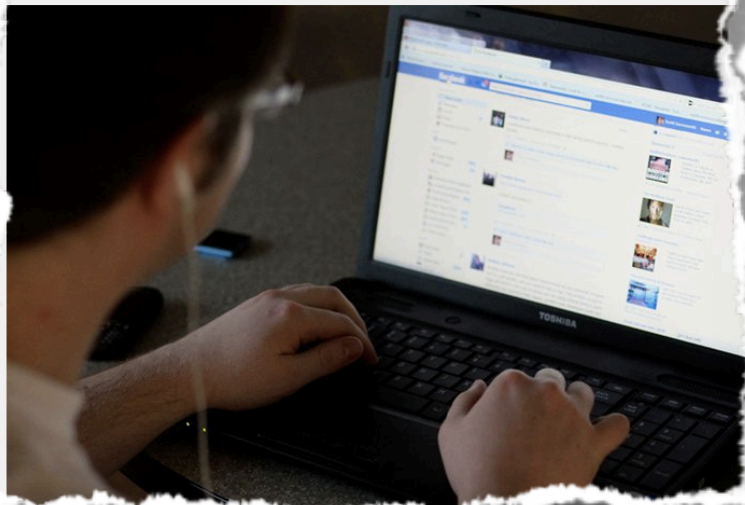
(e.g., mayor of McDonalds)

# Social Media Posts

**"Dystextia": Stroke diagnosed with help of garbled text message**



**Facebook activity may reflect mental health issues according to MU psychology study**



## Unhealthy Sports

(e.g., beer pong pictures)

## Moral/Ethical Criteria

(e.g., employees asking for passwords)

## Dangerous Behavior

(e.g., sky diving)

# Computer Vision / Ambience Monitoring



Face Recognition / Ads Targeting

## Profiling

(e.g., gender, age, ethnicity)

## Audio Recording

(e.g., counts number of coughs)

## Tracking

(follows you around the mall)



# Scales / Devices



Withings Scale



Jawbone Up

Body Fat %

(and your holiday trends)

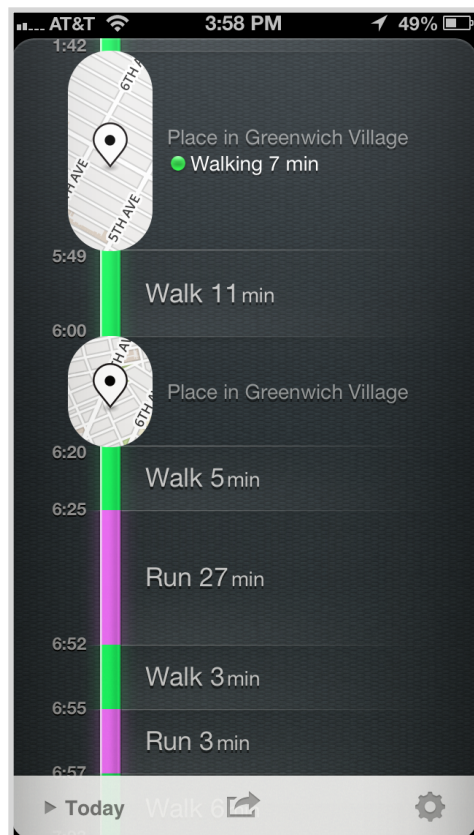
Air Quality

(speaks about your cleanliness)

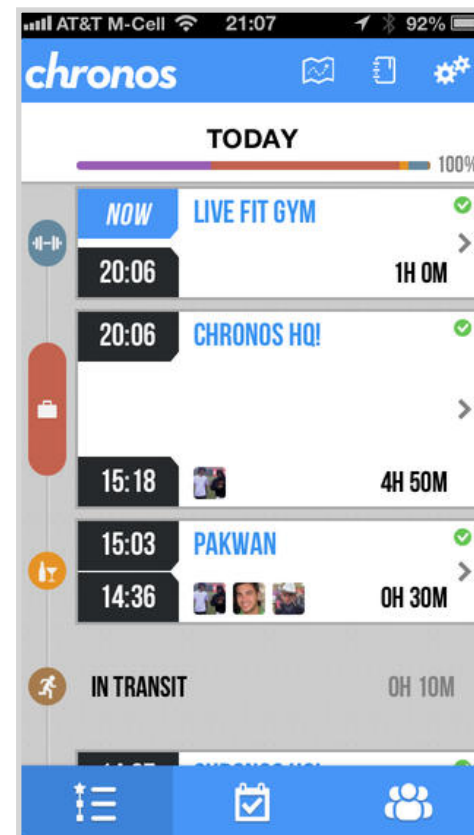
Unusual Activities

(e.g., high intensity activity at 2am)

# Activity Monitoring Apps



Moves



Chronos

Where you went

(how long for and with whom)

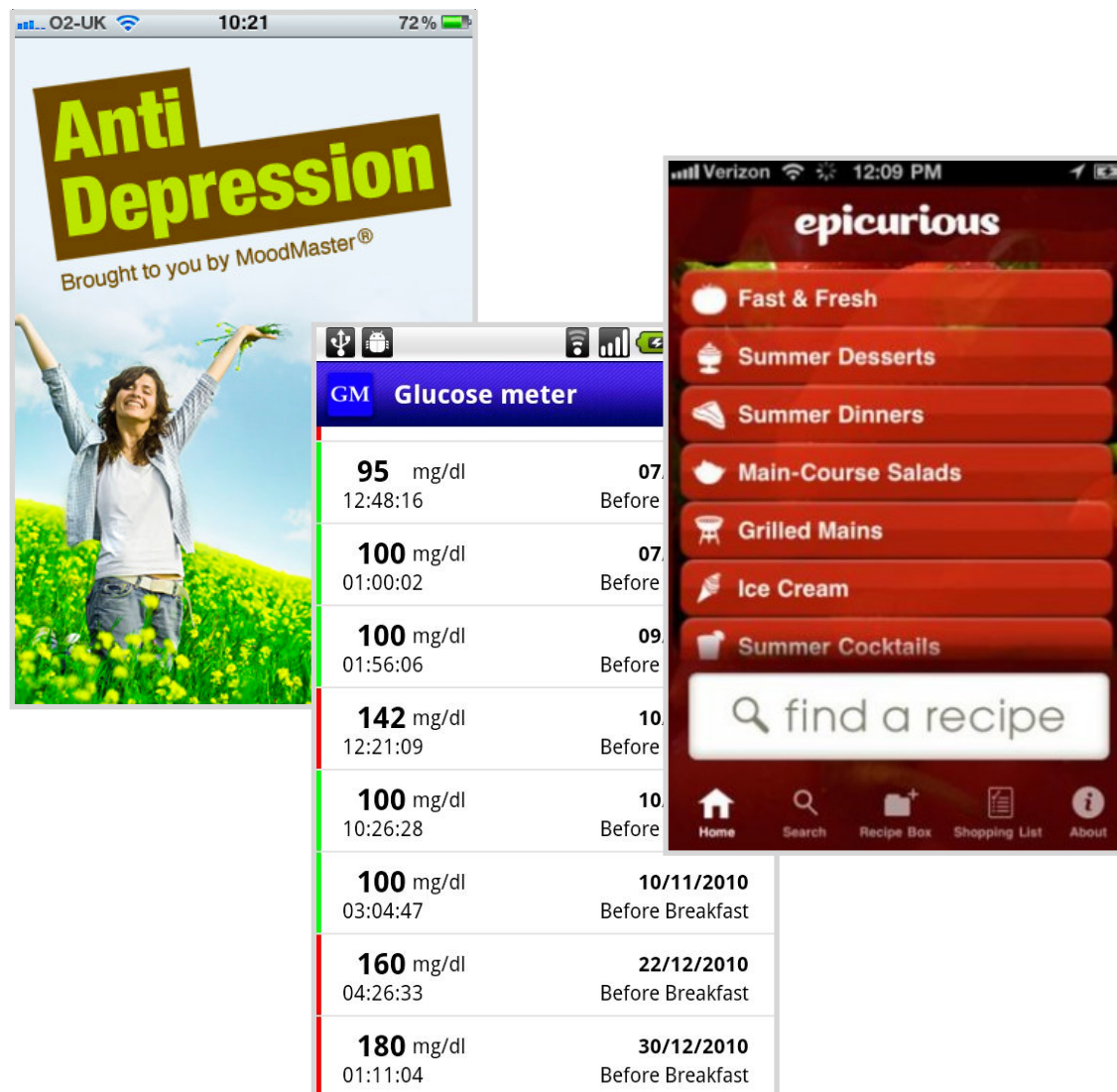
How much you sleep

(or what you do at night)

Driving Habits

(e.g., speed, acceleration patterns)

# Inferring Conditions from Apps



## Depression Apps

(or stress level monitoring)

## Glucose Monitoring

(probably diabetic)

## Celiac Disease

(if you search gluten free recipes)

# Alessio Signorini

alessio-signorini@uiowa.edu

twitter.com/a\_signorini

## Computational Epidemiology Group

University of Iowa