

NEEDFINDING

# Viewing the Crowd at Different Angles

CS147

# Our Team



ADAM GINZBERG

**Year:** Senior  
**Major:** CS (AI)  
**Main Role:** Development



ALEX TRAN

**Year:** Senior  
**Major:** CS (Systems)  
**Main Role:** Development



HAILEY SPELMAN

**Year:** Senior  
**Major:** Symsys (HCI)  
**Main Role:** Design



VICTORIA WEE

**Year:** Senior  
**Major:** CS (HCI)  
**Main Role:** Product

THEME: CROWD POWER

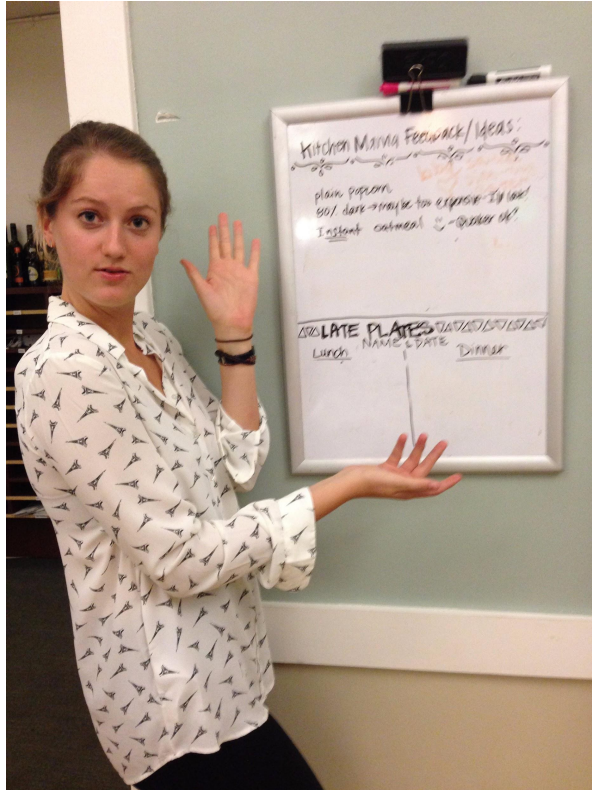
# Needfinding Methodology

- Explore many different perspectives
  - potential end users (consumers)
  - business managers
  - experts in crowdsourcing
  - extreme consumers of crowd-powered tech
- go to the places these people work, shop, etc and observe them in their natural habitat
- interview them about their day to day lives and experiences

# From the top...



# ... to real world systems...



# ... to a member of the crowd ...

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DRIVER EN ROUTE

164 University Avenue

1135 Campus Drive

2 MIN

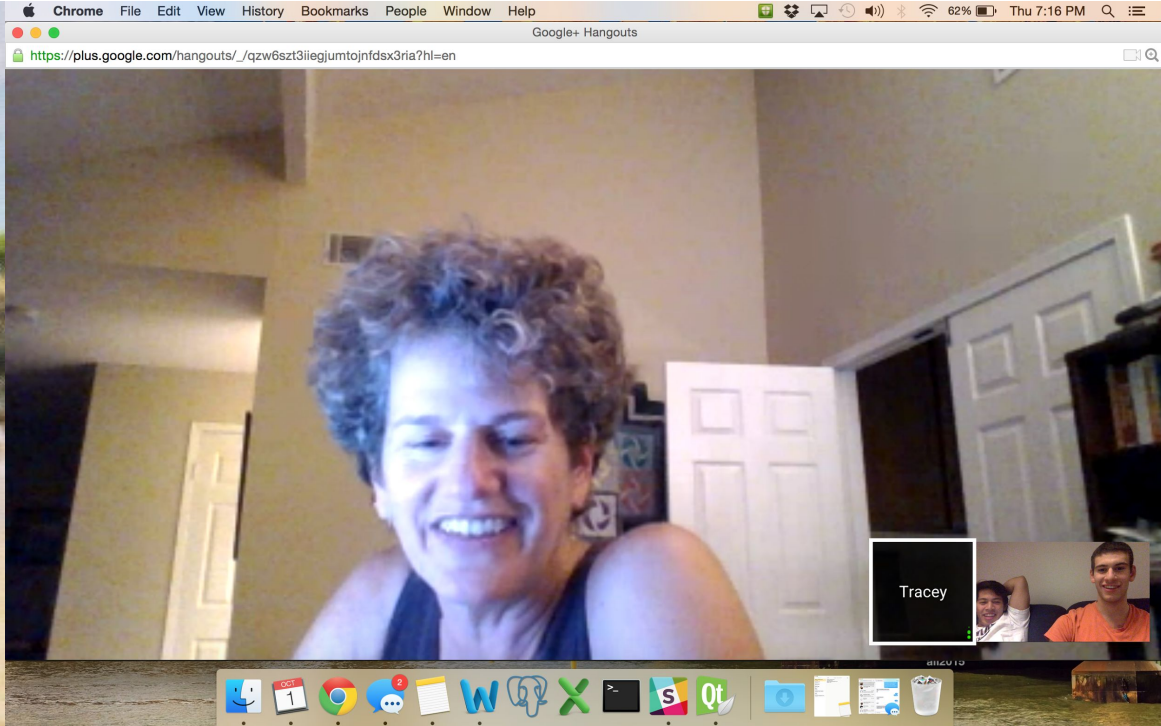
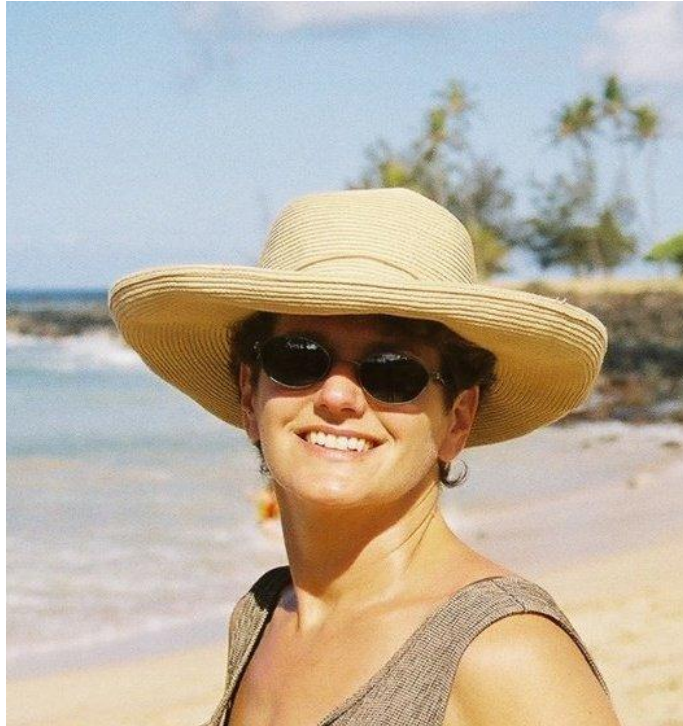
ANDRE  
uberX

6UEN775


MERCEDES-BENZ  
GL-CLASS



... to the average user ...



# ... to the extreme consumer

We'd love to have you on the South Bay Elite Squad!  Inbox



Yelp South Bay  
to me  
2:49 PM [View details](#)



## Jasmine "the traveler" X.

San Francisco, CA



503 Friends



831 Reviews



872 Photos

**Elite 2015 '14**



Hey there, Jessica X.!





# Interview Results

## GENERAL KNOWLEDGE

- ❖ What it's like to work for, in, and research crowdsourcing
- ❖ How people interface with the crowd in real life
- ❖ Business challenges: predicting variability of demand (without surplus or waste)



# Interview Results

## SURPRISES



- ❖ User engagement: quantity or consistency?
- ❖ Challenges with crowd opinion & actions
- ❖ Crowd power does not necessarily *better* the life of an individual user
- ❖ Participating in a crowd is not always an explicit choice

# SAY



"People are motivated to back a product if the result is concrete, the deliverable is in the near future, and they get some sort of social reward"

"When Oregon comes in to play Stanford, I know I have to account for bigger crowds"

"Having an online presence makes me feel empowered"

"Posting reviews on Yelp gives me a legitimate excuse for taking photos"

"The fun is searching down something that is really nice, really cheap, & that I'm not really making a permanent commitment to"

"Uber is constantly sending us emails asking if there is anything they could do to help out. They even pay for our tolls."

"If feedback were directly correlated to getting what you wanted from that feedback then everybody would do it"

"Fundworthy"

"Casting a wide net is good for task with a wide scope, but perhaps inefficient for more specific tasks"

"The crowdfunding platform isn't worried about the end-user"; the campaign starter markets it

"... thought we would formally organize crowd by telling people what to do each week; however in action, we were surprised to realize we could not control people like that. They are not like machines or robots."

"Not being anonymous is employed when people know their identity is more powerful"

"My biggest challenge is predicting demand"

# THINK



Likes shopping that is more low commitment

Non-traditional services require experimental users

My results reflect upon me because I am a tangible public figure to a crowd

People are more likely to complain than to praise

Crowd is fickle: requires a good strategy to maintain/engage users.

Prefers passengers who are interested in talking to him

Social community around sharing transforms boring task of writing reviews

The purpose of crowdsourcing is to achieve goals rather than to directly serve users

People are motivated by concrete results; uncertainty leads to hesitation

Are the needs of this individual scalable for the group?

"The crowdfunding platform isn't worried about the end-user"; the campaign starter markets it

It's easier to shop when you are not overwhelmed with choices

Uber is a good way to put his car to use and to get value out of it

It is hard to predict crowd behavior

Crowd powered projects don't necessarily make users making up the crowd better. The users can be pawns that together build a collective whole making something external to the users better.

How can we control/predict the agency of people?

The bigger the crowd, the better: more users (measured by check-ins and reviews) gives more credibility

# DO



Adding perks to be one of the first in the crowd

Refines & resolves the needs, desires & feedback of a crowd

Has always rated his passengers 5 stars and takes pride in his high rating

Shops on her own without interacting with workers

Asks for feedback & actively responds to it

Uses technology to connect to unknown users

Uses Google Sheets to keep track of inventory, labor, costs, revenue, etc.

Removes the monetary risks of an existing service with crowdfunding

Analyzes large tasks that can be reduced to many tasks with the least amount of difficulty

Avoids the late night (and potentially inebriated) crowd (i.e. crowd extremists)

Only goes to malls for the restaurants or movies

Gives high priority to interacting with customers

Enjoys rewards of Yelp Elite

# FEEL



Frustration: doesn't like laying people off or wasting supplies

Really enjoys talking to people and helping them

Overwhelmed: doesn't know what to look for when too many choices

Positive: my persona matters

More confident and empowered knowing that strangers trust and rely on her advice

Sense of security in trusting highly rated Yelp reviewers

Important: his work can revolutionize industries

Helplessness: can't always schedule workers or buy supplies optimally

Gratitude for how easy it was to start working as a driver

Reflective: how would this service benefit me?

Insecure: what do the people that I serve think of me?

Adventurous: likes the sense of exploration and unknown that comes with thrift shopping

Uncomfortable: unsure of who his end-user is

# Analysis

## TENSIONS & CONTRADICTIONS



- ❖ Users are hesitant to participate in a crowd-effect if they are aware that the crowd-size is low (unwilling to be the snowball)
- ❖ Users are a high priority when the product/end goal reflects on a real, tangible human but not as much otherwise

# Analysis

## INFERENCES & CONCLUSIONS

- ❖ Real-world crowd interfacing vs. crowd for technology
- ❖ Surplus/waste balancing
- ❖ Employment opportunities to all
- ❖ “Expert” domains (legal, medical, education...) have high potential
- ❖ Employing crowd is cheaper than employing professionals

# Analysis

## QUESTIONS

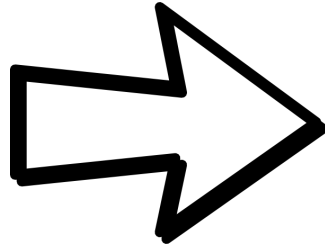
- ❖ How much attention should be given to an individual user?
- ❖ How can we use crowds to utilize surpluses and minimize waste?
- ❖ How can we offer the crowd new and flexible employment opportunities with respectable wages?
- ❖ How can we use the crowd to better predict the variance of human flow?



# Analysis

## NEEDS

- ❖ To feel social connection
- ❖ To feel in control
- ❖ See concrete results



## INSIGHTS

- ❖ Part of a whole AND individually important
- ❖ The combined effort of the crowd should be transparent, concrete & IMPORTANT



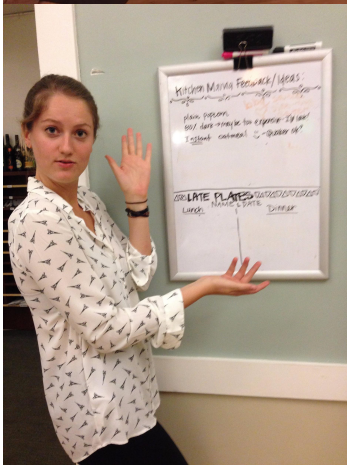
# Summary

**Jasmine "the traveler" X.**

San Francisco, CA

🍷 503 Friends ★ 831 Reviews 📷 872 Photos

Elite 2015 '14



- ❖ Interviews → Focus Areas
  - Surplus/Waste
  - Employment
  - Variation of Crowds



NEXT UP...