# The Consumer Insight Platform
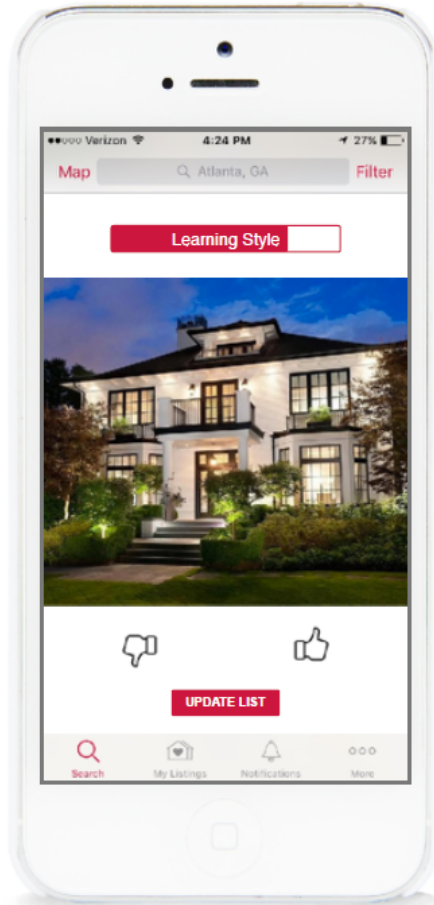
# Our Mission

Bringing Science to the Art of Home Buying
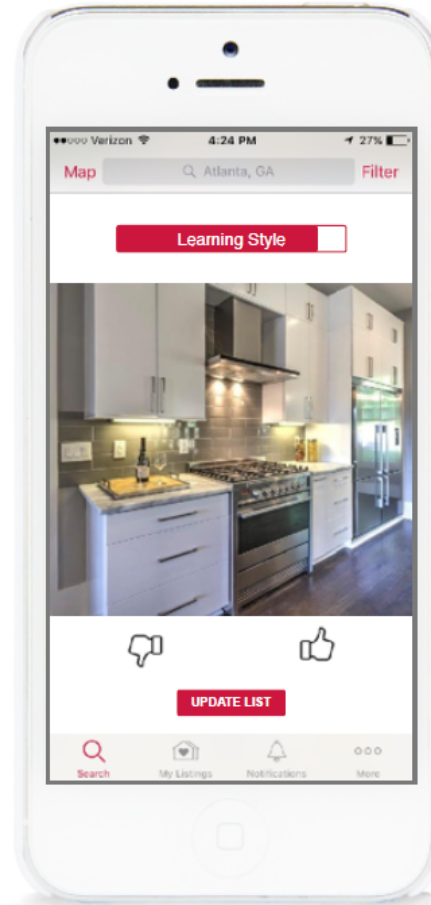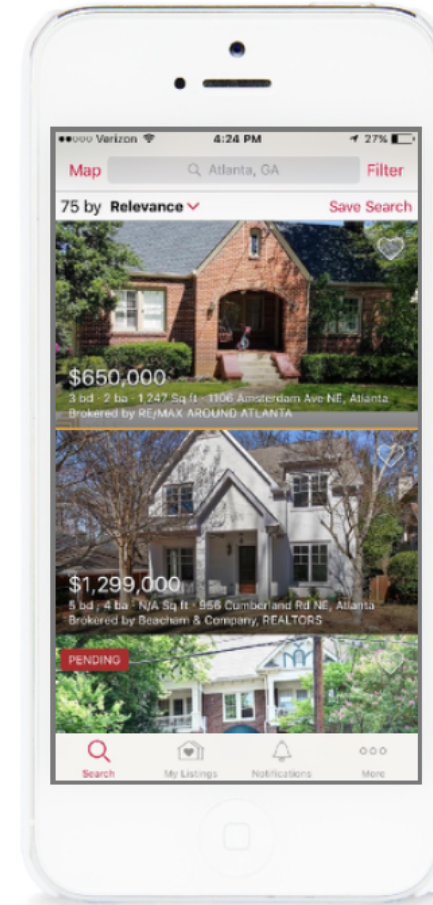
# Home Buying is Visual and Personal



Visual, Interactive, Intuitive

More than just the facade
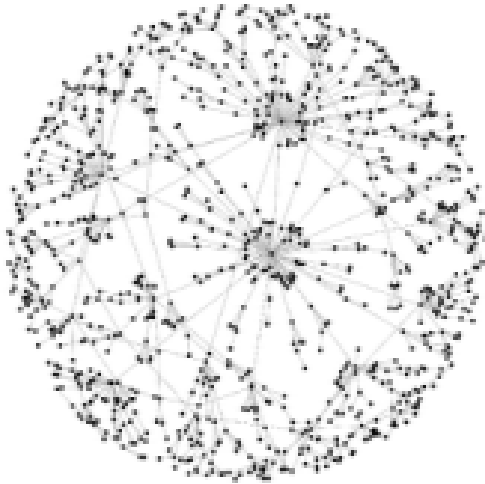
Curated, personal recs

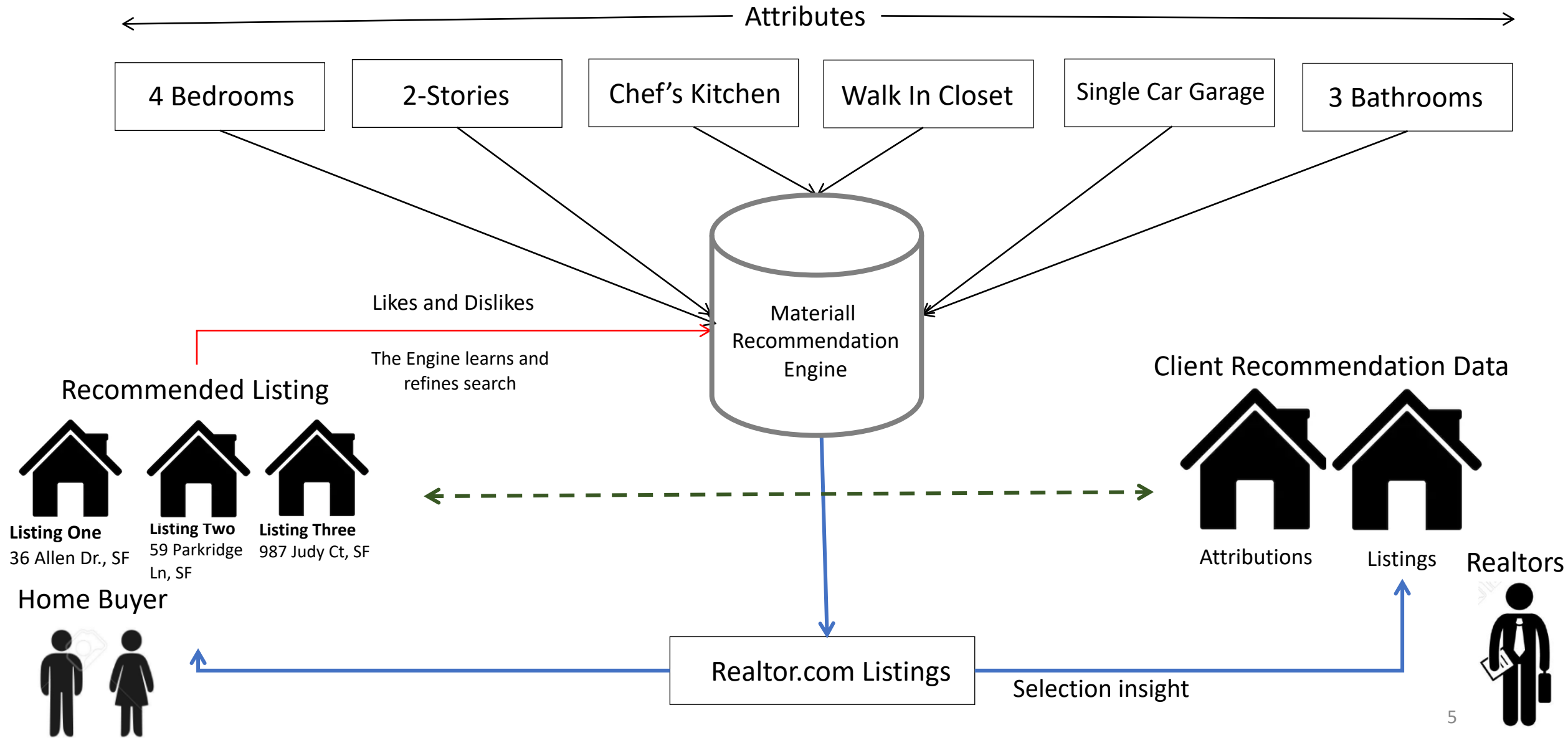# Data Science is Key

## Contextualized visual data

- The One Place's proprietary visual classification taxonomy
- Deep learning algorithms automate and contextualize large data sets

## A.I. personalization algorithms

- Rapidly maps out topography of user's style profile, finds global match
- Build user's internal sense of confidence through exposure and learning

# Combination of objective and subjective features

Attributes

| 4 Bedrooms | 2-Stories | Chef's Kitchen | Walk In Closet | Single Car Garage | 3 Bathrooms |

Materiall Recommendation Engine

Likes and Dislikes

The Engine learns and refines search

Recommended Listing

**Listing One**
36 Allen Dr., SF

**Listing Two**
59 Parkridge Ln, SF

**Listing Three**
987 Judy Ct, SF

Home Buyer

Client Recommendation Data

Attributions          Listings          Realtors

Realtor.com Listings

Selection insight

# The Challenge is in Matching the Features



Friends

Parents

Singular Attributes

Multi Attributes

Singular Attributes

Shared Attributes

Multi Attributes

Multi Attributes

Singular Attributes

Shared Attributes

Attributions

Listings

Multi Attributes

Attributions

Listings
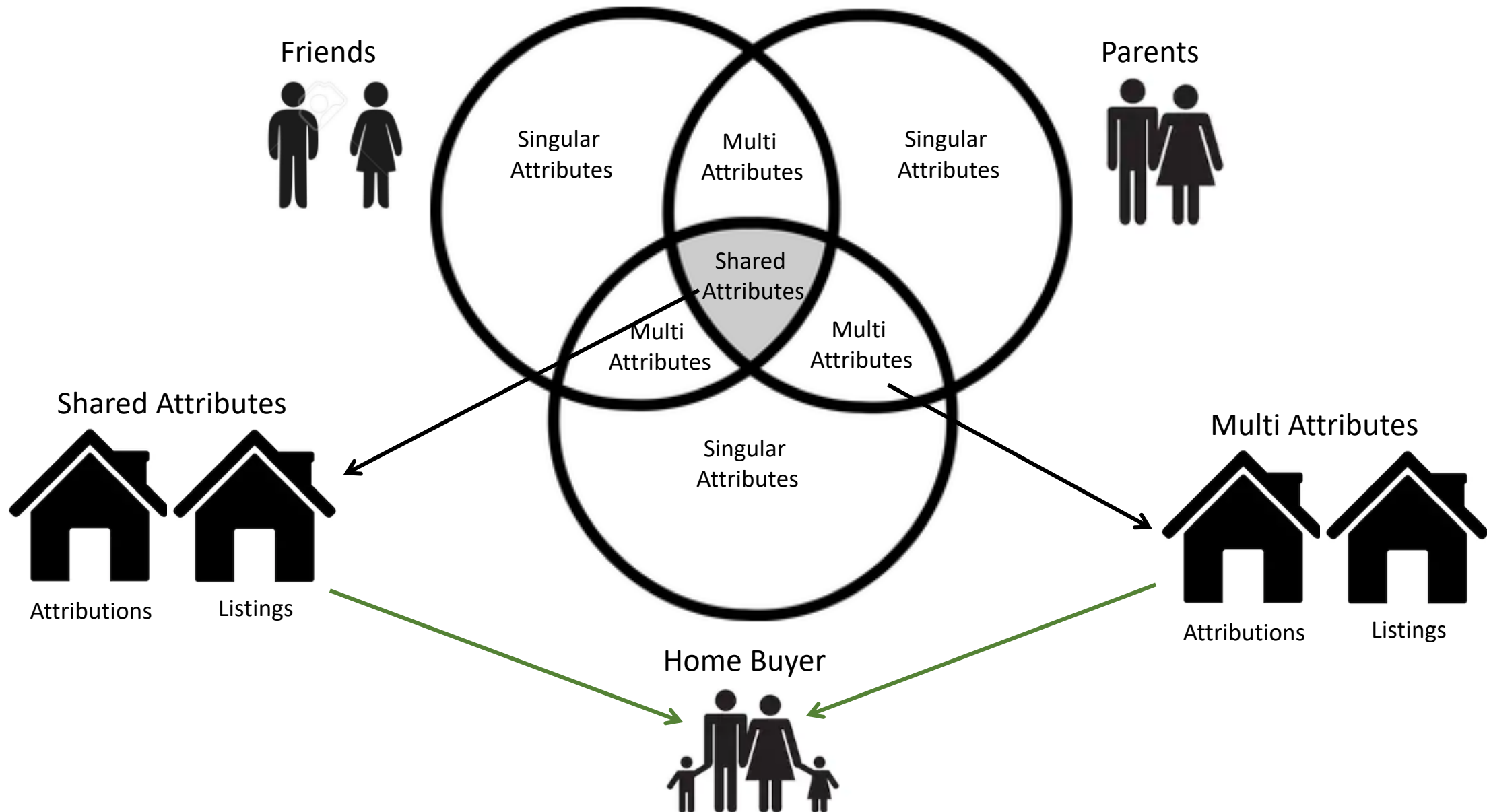
Home Buyer

# This can transform Home Buying

## Susan's preferences

**Requirements**

- 3 bedrooms, 2.5 baths
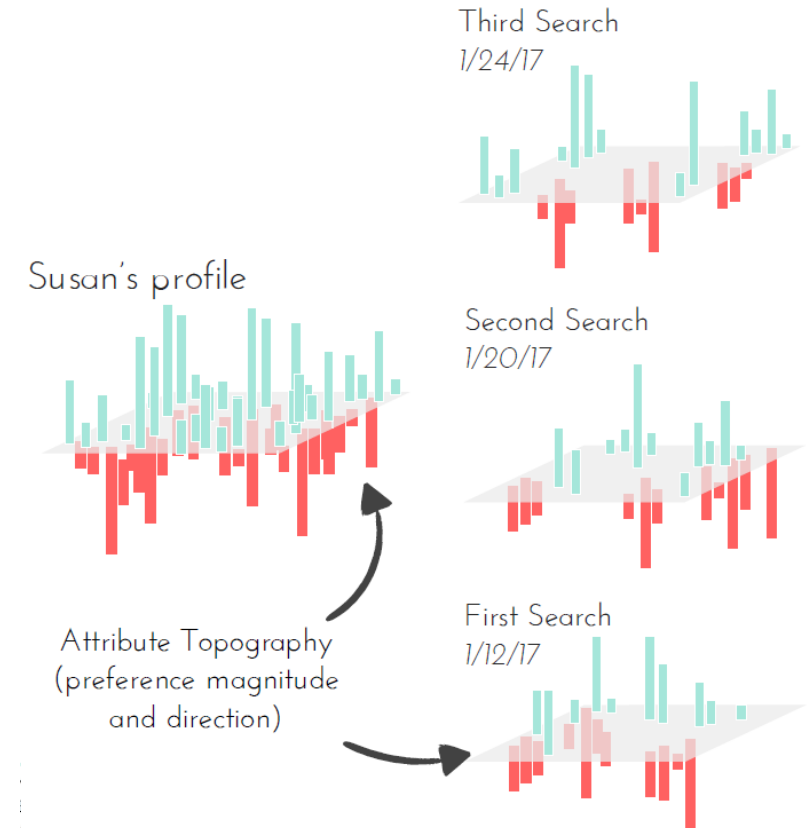- Top rated school district

**Top attributes**

- Walk in master closet (+72%)
- Vaulted ceilings (+45%)
- Wood burning fireplace (+36%)

**Bottom attributes**

- Blue exterior (-39%)
- Single car garage (-28%)

**Home recommendations**

- 36 Allen Dr.
- 59 Parkridge Ln
- 5632 Woodridge Cir



Third Search 1/24/17

Second Search 1/20/17

First Search 1/12/17

Susan's profile

Attribute Topography (preference magnitude and direction)

# The Challenge

Can we extract, learn and classify attributes (both text and image) ?

Can the learning be both supervised and unsupervised ?

Can we classify features from text and images and use each to enhance the accuracy of the other ?

# Our team: big data and real estate expertise

YAHOO!

realtor.com

amazon

We built the Data and Data Science Teams for them

Mentors:

Dr. Rohit Jain, Dr. Amar Ray, Bharat Vijay, Anand Ramani, KN Amarnath