

# **predicting 's elite**

how does user activity, popularity, and review  
content/style drive recognition?

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## WHAT IS “ELITE”?

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**“Members of this exclusive, in-the-know crew reveal hot spots for fellow locals and are the true heart of the Yelp community, both on and offline.”**

**Yelp Elite Squad: NYC - Manhattan** 

[Not in NYC - Manhattan?](#)



1

## **authenticity**

real people. real reviews. 

2

## **contribution**

reviews, tips, photos

3

## **connection**

social activity, community linkages

## HOW DOES YELP CHOOSE ELITES?

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**6%**

of all users

# HOW DOES YELP CHOOSE ELITES?

The complete guide on how to become a Yelp Elite

January 31, 2015 Dining Corner, Motivation Corner, Social Corner

12 Comments

9:23 PM AT&T 53%

Vy N.

Elite '15 Elite '14

"People who love to eat are always the best people!"

Davis, CA • Yelping since March 2014

[Editor's note: This is a guest post from Vy Nguyen.]

I learned about Yelp during my first year studying in U.S. This is a great app for anyone to find whatever services they need nearby their current location, along with reading honest (sometimes it can be too honest) customer reviews. Often enough, you will find reviews with a red Yelp badge next to their first name i.e. "Elite'15". Does it mean they are cooler than you? Maybe!

I never knew about the world of Yelp Elite until 2014! One of my friends at UC Davis told me about it, while we were just drinking boba. Then, it just hit me! I WANTED TO BECOME A YELP ELITE, NOT JUST A REGULAR ELITE BUT AN INTERNATIONAL ELITE!!! I only gave myself 6 months to obtain the Yelp Elite Badge! Guess what? I got it after 3 MONTHS! Since then, I always get invitations to exclusive Yelp Elite Events and insights for brand new businesses nearby. I think this is a fun thing for any international students who are interested in food, writing, blogging and use Yelp on a regular basis to look for businesses.

## How does one become a member of the Yelp elite?

Answer Re-Ask Follow 15 Comment Share Downvote

Have this question too? Re-Ask to get an answer.

### 4 Answers

Aron Yu, Casual Yelper  
2.6k Views

## wikiHow to do anything...

Article Edit Discuss Home » Categories » Computers and Electronics » Internet » We

## How to Become an Elite Member of Yelp

Edit Article

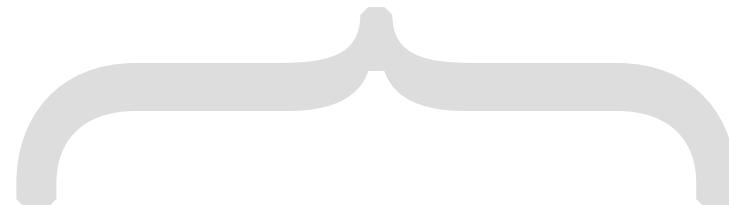
### Questions and Answers

Becoming Elite on Yelp means that you get to be a taste maker, at least on one corner of the web. To start down the path towards Elite-hood, you need to be an active member of the Yelp community. Follow this guide to get into those Elite parties!

GOAL: CAN WE PREDICT IF A USER IS ELITE?

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# authenticity contribution connection



## activity

# of reviews  
# of tips



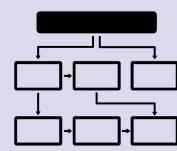
## popularity

# of friends, fans  
# of compliments, votes



## sentiment / content

average rating, key words / topics



## structure / readability

review / sentence / word length, writing style

## data



dataset challenge

550k+  
users

2.2m+  
reviews

590k+  
tips

## methodology

train  
75%

test  
25%

cross-validation  
grid search

logistic regression (SGD)  
**linear SVM (SGD)**  
**random forest**  
naive bayes

## MODEL PERFORMANCE

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baseline  
(always predict not elite)

**94%**  
accuracy

**94%**  
auc

**N/A (0%)**  
f1 score  
(elite class)

best model  
(rfc)

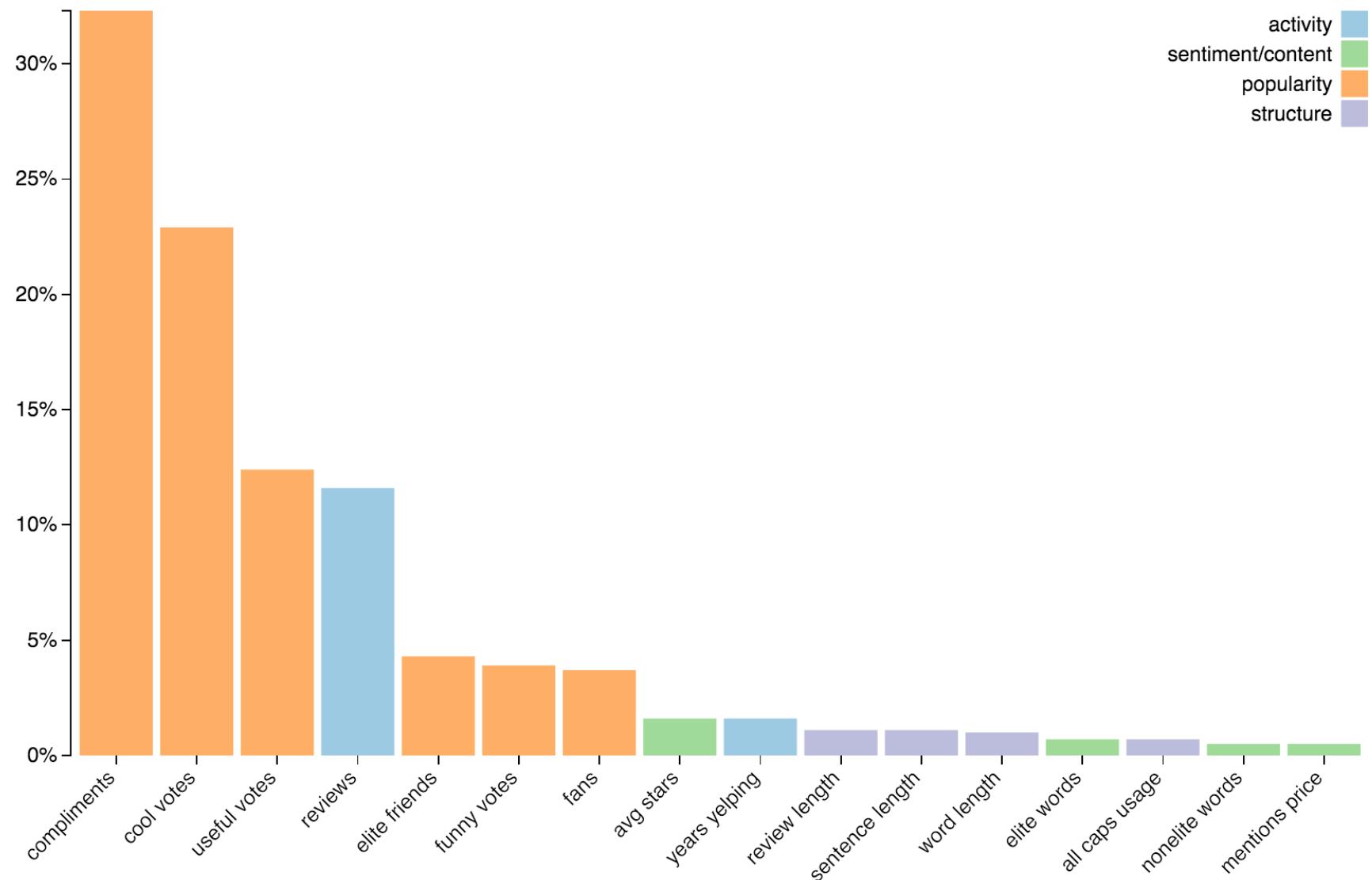
**98%**  
accuracy

**99%**  
auc

**80%**  
f1 score  
(elite class)

**+70-80%**

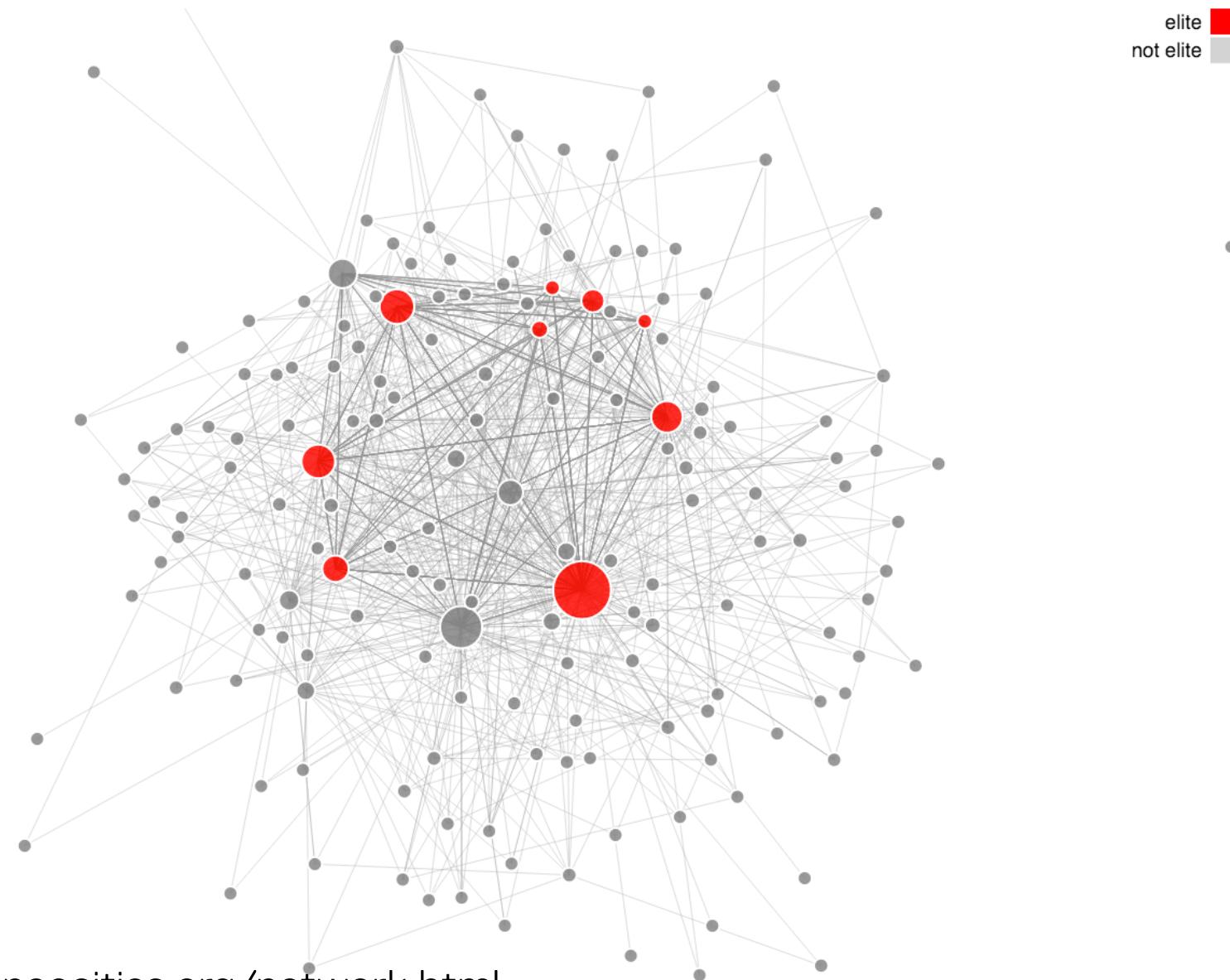
### Predicting Yelp's Elite: Feature Importance





## FINDINGS: POPULARITY

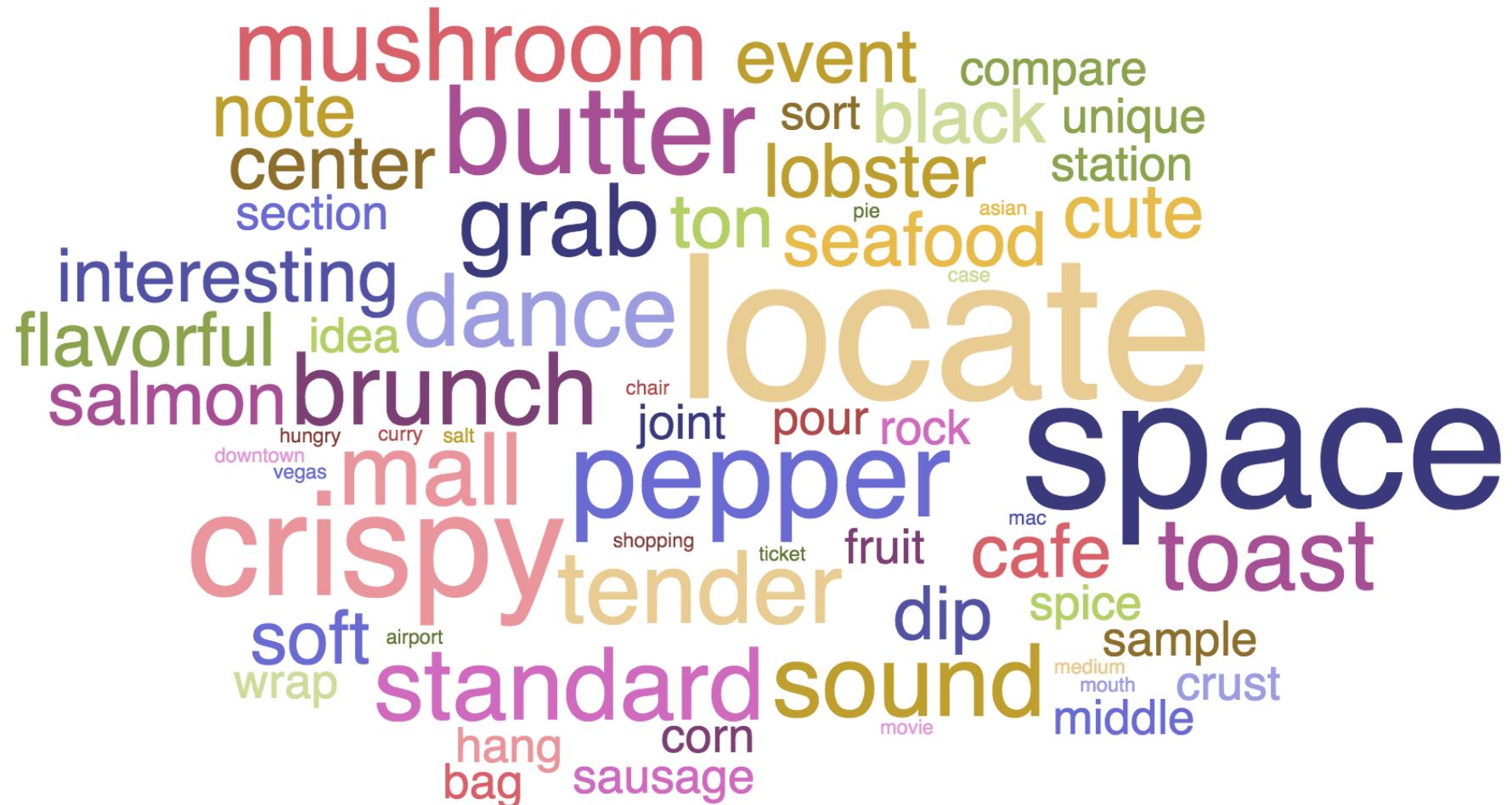
### Predicting Yelp's Elite: User Friend Networks



[dianalam.neocities.org/network.html](http://dianalam.neocities.org/network.html)



## Top 50 unique words used by elites



# Top 50 unique words used by non-elites





### **popularity**

number of elite friends

number of fans

number of compliments and useful/cool votes



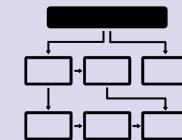
### **activity**

number of reviews



### **sentiment / content**

about food  
vs.  
complaints



### **structure / readability**

matters less, but  
keep it  
readable

## NEXT STEPS

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1

determine review / votes / compliments threshold through analysis over time

2

topic modeling / further analysis of review content

3

what drives popularity? + other user data

**thanks!**

questions?

diana lam

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