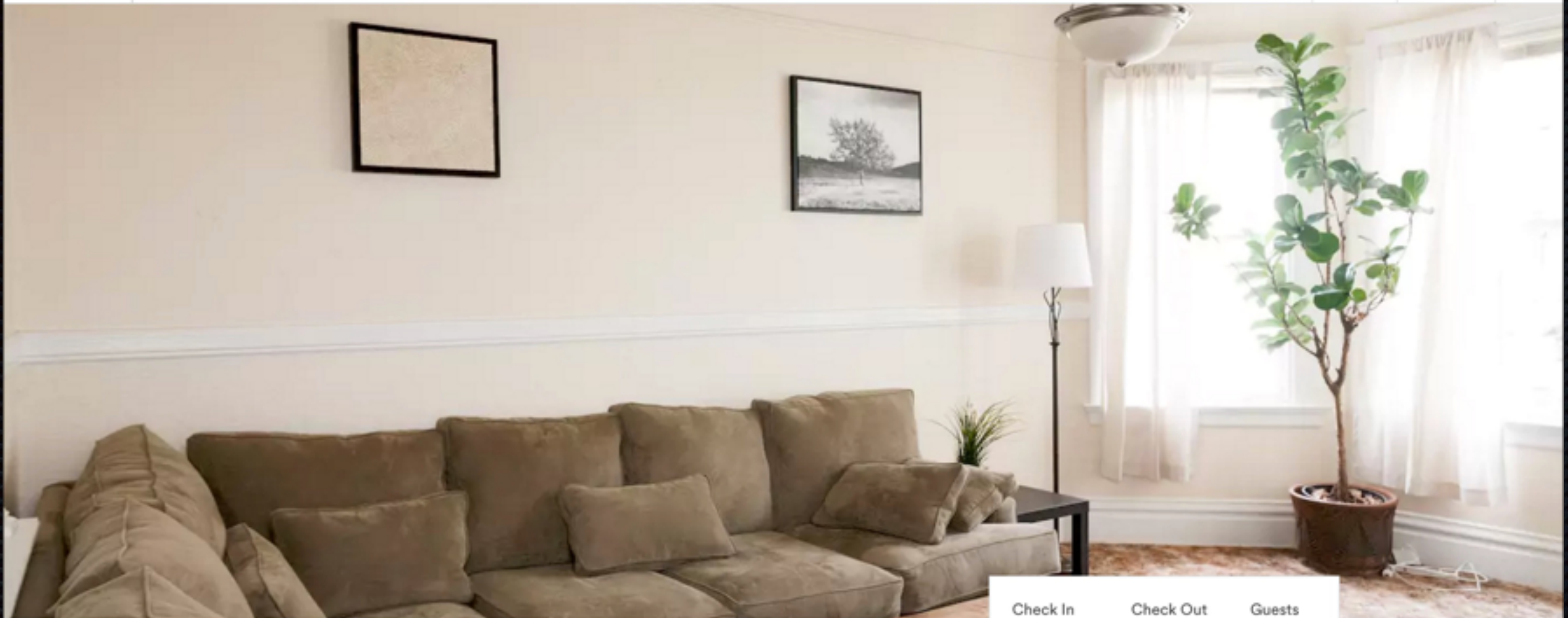


generating airbnb review summaries

Carl Van Haren





Amazing location - big sunny room

San Francisco, CA, United States · ★★★★★ 53 reviews

Check In

mm/dd/yyyy

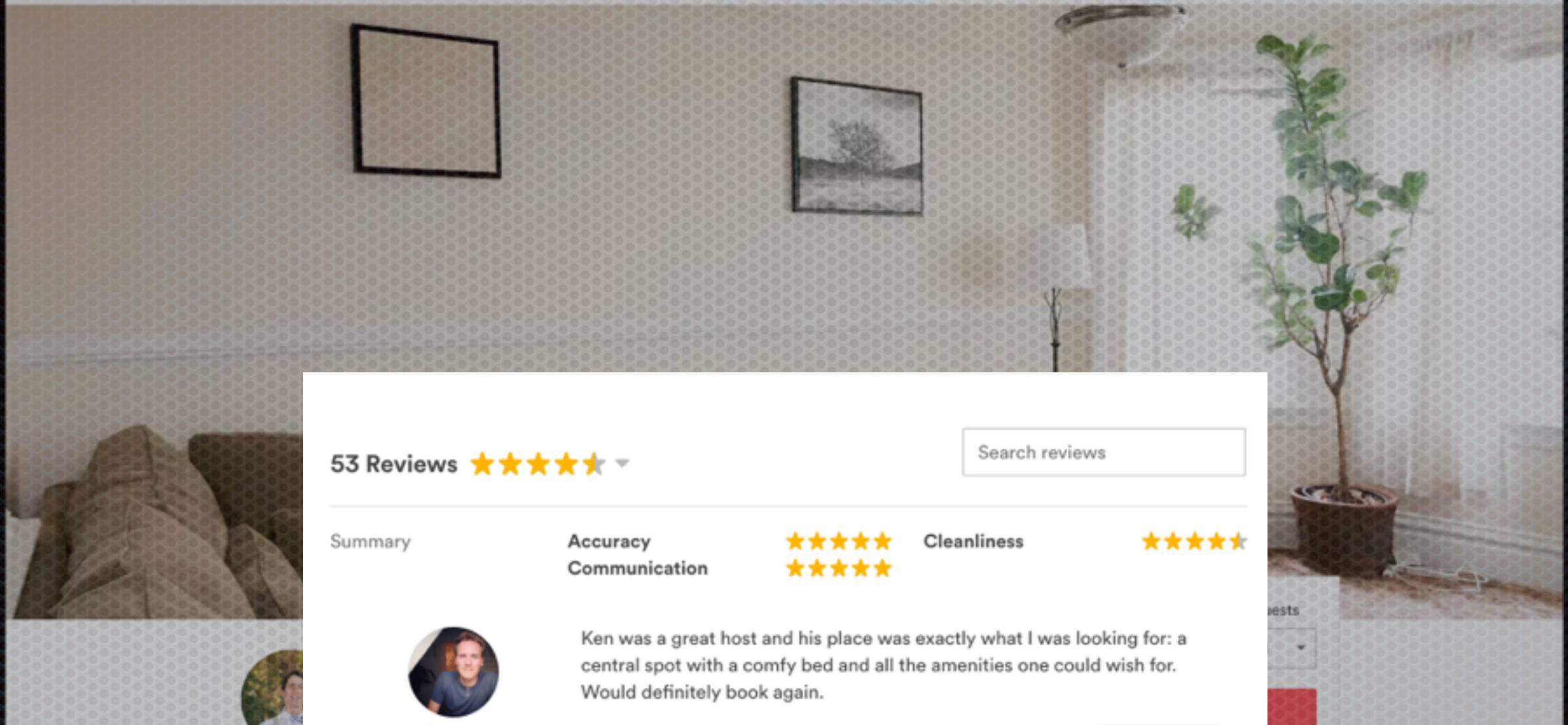
Check Out

mm/dd/yyyy

Guests

1

Request to Book



53 Reviews ★★★★★

Summary

Accuracy
Communication

★★★★★
★★★★★

Cleanliness

★★★★★

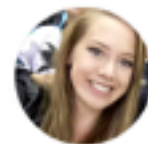


Steven

Ken was a great host and his place was exactly what I was looking for: a central spot with a comfy bed and all the amenities one could wish for. Would definitely book again.

August 2016

Helpful



Sarah

My month-long stay at Hermannsion was my first Airbnb experience, and Ken has definitely set the bar high. From a bottle of wine waiting on my bed to being more than accommodating to visiting guests during my one-month stay, he made sure to always make me feel at home. In addition to Ken's hospitality, the neighborhood can't be beat: Duboce boasts some of

[+ More](#)

July 2016

Helpful

- No summary
- No way to sort reviews by rating
- Nothing to do but read them all!

53 Reviews ★★★★★


Summary

Accuracy
Communication

★★★★★
★★★★★

Cleanliness


★★★★★


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+ More

July 2016

Helpful

There's got to be a better way!

Chipotle Mexican Grill



459 reviews

[Details](#)

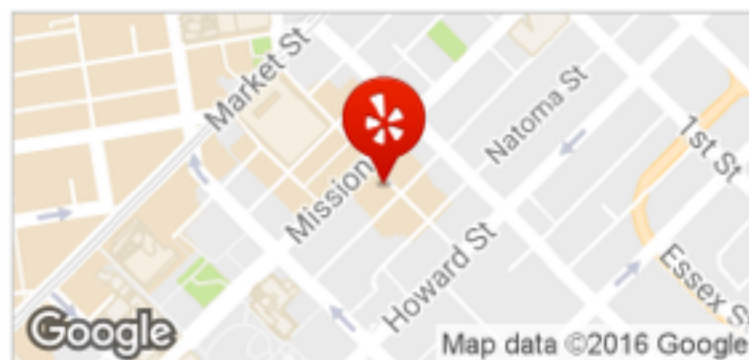
★ [Write a Review](#)

[Add Photo](#)

[Share](#)

[Bookmark](#)

\$ · [Mexican, Fast Food](#)



126 New Montgomery
San Francisco, CA 94105
b/t Minna St & Mission St
Financial District, SoMa

[Edit](#)

[Get Directions](#)

[\(415\) 512-8113](#)

[chipotle.com](#)



Chipotle Mexican Grill - San Francisco, CA, United States



[See all 59](#)



Chipotle Catering- Perfect For Any Event!

[View Now](#)



"Let me just say, that if there is such a thing, I'm a 2/3rds **vegetarian** or a 1/3rd meatarian." in 15 reviews



"In the long run, that is a much better return on investment than trying to collect the money for those 7 or 8 **burritos**." in 99 reviews



"The rice had a nice stickiness to it and the **chicken** was chopped into small, easy to eat pieces." in 60 reviews

[Show more review highlights](#)



Today 11:00 am - 9:00 pm
Closed now



[Menu](#)

\$\$\$

Price range **Under \$10**

100

Health inspection 100 out of 100



Vegetarians go nuts for this spot. [See other places](#) they like.

Hours

| | |
|-----|--------------------|
| Mon | 11:00 am - 9:00 pm |
| Tue | 11:00 am - 9:00 pm |
| Wed | 11:00 am - 9:00 pm |
| Thu | 11:00 am - 9:00 pm |

Chipotle Mexican Grill



459 reviews

[Details](#)

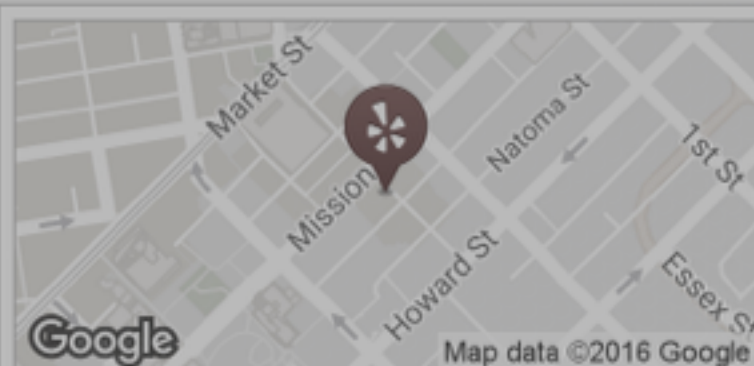
[★ Write a Review](#)

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\$ · Mexican, Fast Food



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Chipotle Mexican

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\$ · Mexican, Fast Food



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[Get Directions](#)

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chipotle.com

Chipotle Catering- Per



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"The rice had a nice s
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[Show more review highlights](#)

Chipotle Mexican Grill ★

[Website](#)

[Directions](#)

3.7 ★★★★★ 99 Google reviews

\$ · Mexican Restaurant

Fast-food chain offering Mexican fare, including design-your-own burritos, tacos & bowls.

Address: 126 New Montgomery St, San Francisco, CA 94105

Phone: [\(415\) 512-8113](tel:(415)512-8113)

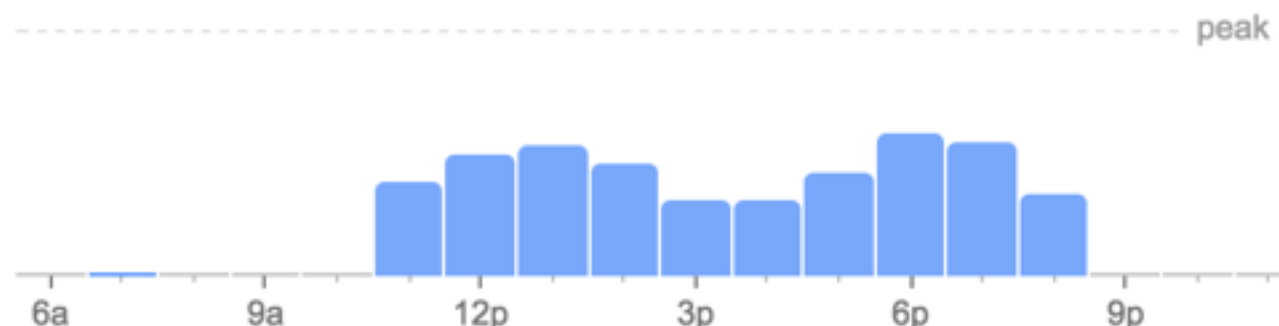
Menu: chipotle.com

Hours: Open today · 11AM–9PM ▼

[Suggest an edit](#)

Popular times ?

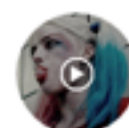
[Fridays](#) ⇅



Reviews

[Write a review](#)

[Add a photo](#)



"The food is awesome especially the burrito bowls."



"**Long Line** during lunch but efficient and try to get you through the line fast."



"**Reasonable** prices, big portions."

[Share](#) [Bookmark](#)



[See all 59](#)

1:00 am - 9:00 pm

ow

ge Under \$10

[Inspection](#) 100 out of 100

[ians](#) go nuts for this spot. [See](#)
[es](#) they like.

00 am - 9:00 pm

00 am - 9:00 pm

00 am - 9:00 pm

00 am - 9:00 pm

BnBot - Data

- Data from Airbnb api and 'insideairbnb.com'
- ~1.8 million reviews
- Ranging from 1 - 735 reviews per property, with a mean of 25

BnBot - Model

- Tf-idf with each individual review as a document
- Tried NMF and LSA

BnBot - Model

| | |
|---------------|----------|
| friendly | 0.382574 |
| helpful | 0.280812 |
| definitely | 0.280117 |
| super | 0.254141 |
| home | 0.193339 |
| perfect | 0.131230 |
| time | 0.125468 |
| good | 0.119059 |
| hosts | 0.102923 |
| welcoming | 0.101151 |
| described | 0.094625 |
| exactly | 0.085618 |
| house | 0.076783 |
| accommodating | 0.070887 |
| felt | 0.068336 |
| like | 0.065317 |
| feel | 0.058842 |
| come | 0.049525 |
| easy | 0.046712 |
| awesome | 0.045464 |

Name: 17, dtype: float64

| | |
|---------------|----------|
| location | 0.508959 |
| host | 0.438153 |
| perfect | 0.219247 |
| house | 0.213264 |
| highly | 0.119263 |
| recommend | 0.116424 |
| wonderful | 0.099380 |
| amazing | 0.093439 |
| excellent | 0.088183 |
| awesome | 0.082185 |
| definitely | 0.077566 |
| accommodating | 0.069310 |
| friendly | 0.067909 |
| beautiful | 0.064561 |
| experience | 0.064391 |
| good | 0.057193 |
| helpful | 0.056073 |
| recommended | 0.052565 |
| fantastic | 0.051461 |
| thank | 0.032968 |

Name: 4, dtype: float64

| | |
|---------------|----------|
| perfect | 0.404679 |
| experience | 0.399142 |
| easy | 0.256511 |
| neighborhood | 0.217134 |
| hosts | 0.184244 |
| friendly | 0.181911 |
| helpful | 0.159894 |
| really | 0.115605 |
| comfortable | 0.111134 |
| lovely | 0.109154 |
| beautiful | 0.103780 |
| accommodating | 0.097152 |
| located | 0.095378 |
| good | 0.091147 |
| quiet | 0.090470 |
| airbnb | 0.086542 |
| thanks | 0.077970 |
| thank | 0.074344 |
| access | 0.066065 |
| welcoming | 0.045121 |

Name: 16, dtype: float64

BnBot - Model

- Tf-idf with each individual review as a document
- Tf-idf transform on each review for a property
- Used mean review vector to weight sentences
- Return top sentences, top negative sentences, and the same without top terms

BnBot - App

- Flask app
- Input an Airbnb URL
- Retrieves reviews from api, returns summary
- For comparison:
 - random.shuffle
 - gensim.summarize
 - Vader negative sentiment

BnBot - Improvements

- Deal with spelling and foreign languages
 - pyenchant
- Doc2vec and clustering
- Better techniques for extracting negative reviews
 - Edit weights in Vader for housing related negativity
 - Filter for reviews with lower scores
- Develop a metric for scoring performance
 - Mechanical Turk or Crowdfunder

THE
END