

Yelp Summary and Recommendations

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**I MAY LOOK LIKE I'M
HAVING DEEP
THOUGHTS BUT
99% OF THE
TIME I'M THINKING
ABOUT WHAT I'M
GOING TO EAT LATER**

Ways to my heart:

- 1. Buy me food**
- 2. Make me food**
- 3. Be food**

*I'm on a
seafood diet
I see food
and I eat it*

WTF

(where's the food)

I'm not hungry.
But, I am bored.
Therefore, I shall eat.

I think I'm in love.
No wait, I was just hungry.

Lovethispic.com



*I'm sorry
for what I
said when I
was hungry.*



Who wants to read when they're hungry?



A Better Way to Approach the Hunger Problem



- ❖ A summary of what a certain restaurant is about (can also apply to shops in other industries on Yelp)
- ❖ Quick recommendations on similar locations!



Data

- ❖ Gathered Yelp Data from the Yelp Dataset Challenge
- ❖ Data came from major areas around the world: Edinburgh, Karlsruhe, Montreal, Waterloo, Pittsburgh, Charlotte, Urbana-Champaign, Phoenix, Las Vegas, Madison
- ❖ Over 2.7 million reviews of over 85,000 vendors
- ❖ Stored in a non-relational database (MongoDB)

NLP

- ❖ Topic modeling using LDA (CountVectorizer)
- ❖ Word2Vec
 - Used trained vectors from Google as well as Stanford
 - KMeans Clustering
- ❖ Not very accurate results
- ❖ TFIDF



Similar Locations

- ❖ Used Stanford Word2Vec vectors to find similar locations
- ❖ Examined the 30 most similar locations based on summary words
- ❖ Next steps
 - Filter by location, genre of food, etc...
 - Working App to be faster
 - Positive vs. Negative reviews

App Demonstration!

Business Name:

Mr. Hoagie

SUBMIT

hoagie

hoagies

italian

bologna

dressing

onions

lettuce

mushrooms

tomato

steak

Mr Hoagie

Carhops Sub Shop

Danny's Pizza

Paradise Bakery

Romano's Macaroni Grill

Arrivederci

The Steak' N Hoagie Shop