

Food Finder

Finding you the best burrito

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The Problem:

There is no way to evaluate reviews of the best restaurant “dishes” in your area.

Mining Yelp reviews for sentiment of individual sentences

The Data:

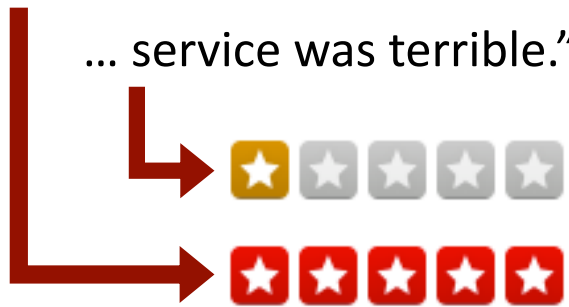
Yelp Academic Dataset (Phoenix, AZ)

- 800 Mexican restaurants
- 40,000 reviews
- 300,000 sentences

The Idea:

“The burrito was amazing...

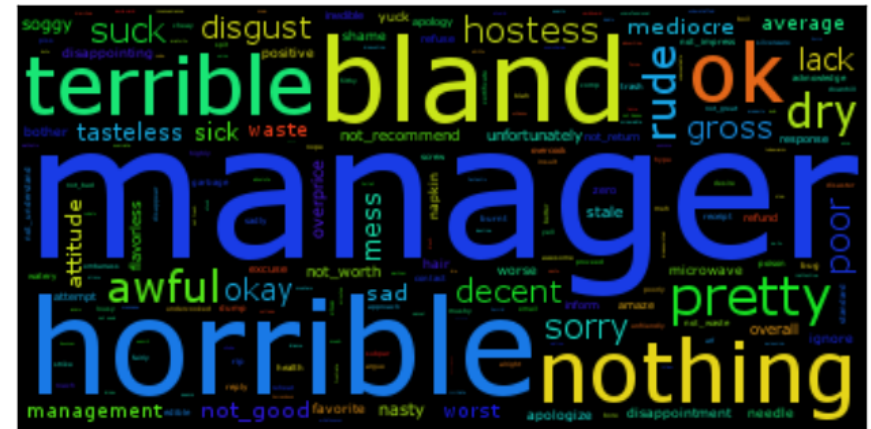
... service was terrible.”



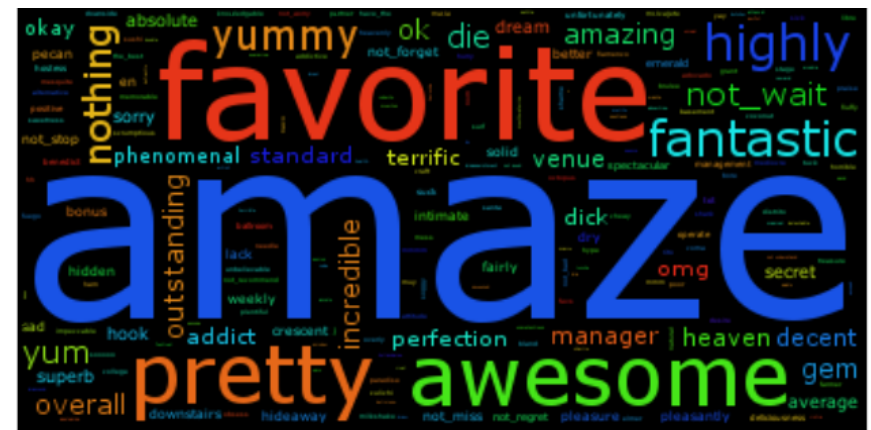
The Strategy:

1. Extract unique vocabulary of 1-5 star reviews
2. Use unique vocabulary to classify sentences
3. Find search term in classified sentences

1-Star Words



5-Star Words

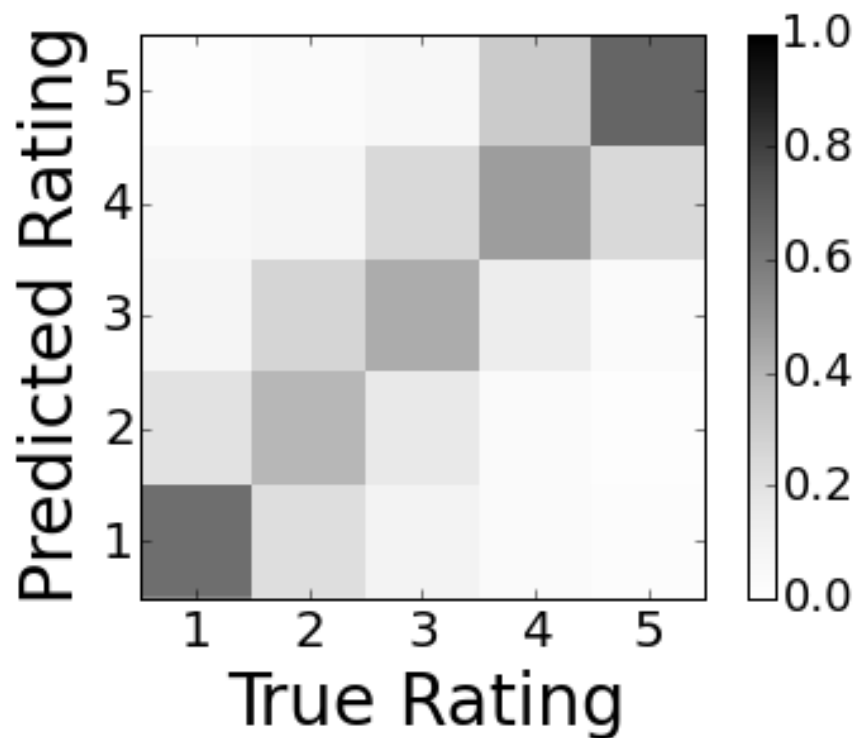


Mining Yelp reviews for sentiment of individual sentences

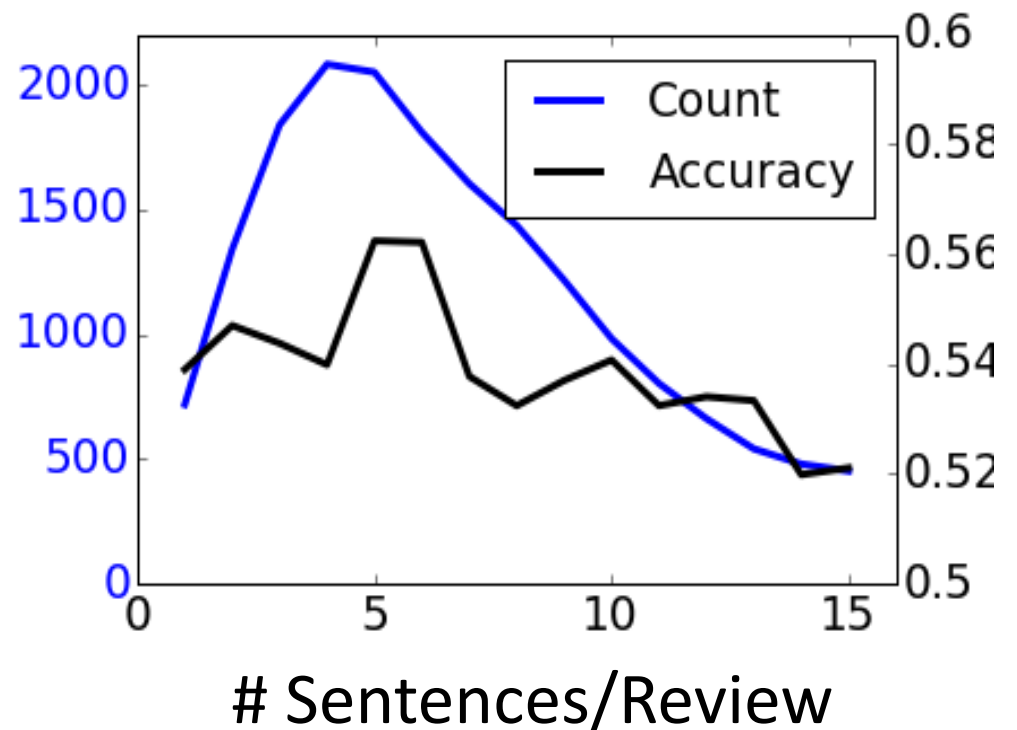
NLP: Lemmatization, negation handling, N-grams, TF-IDF

Classification: Multinomial Naïve Bayes

Classification of Reviews

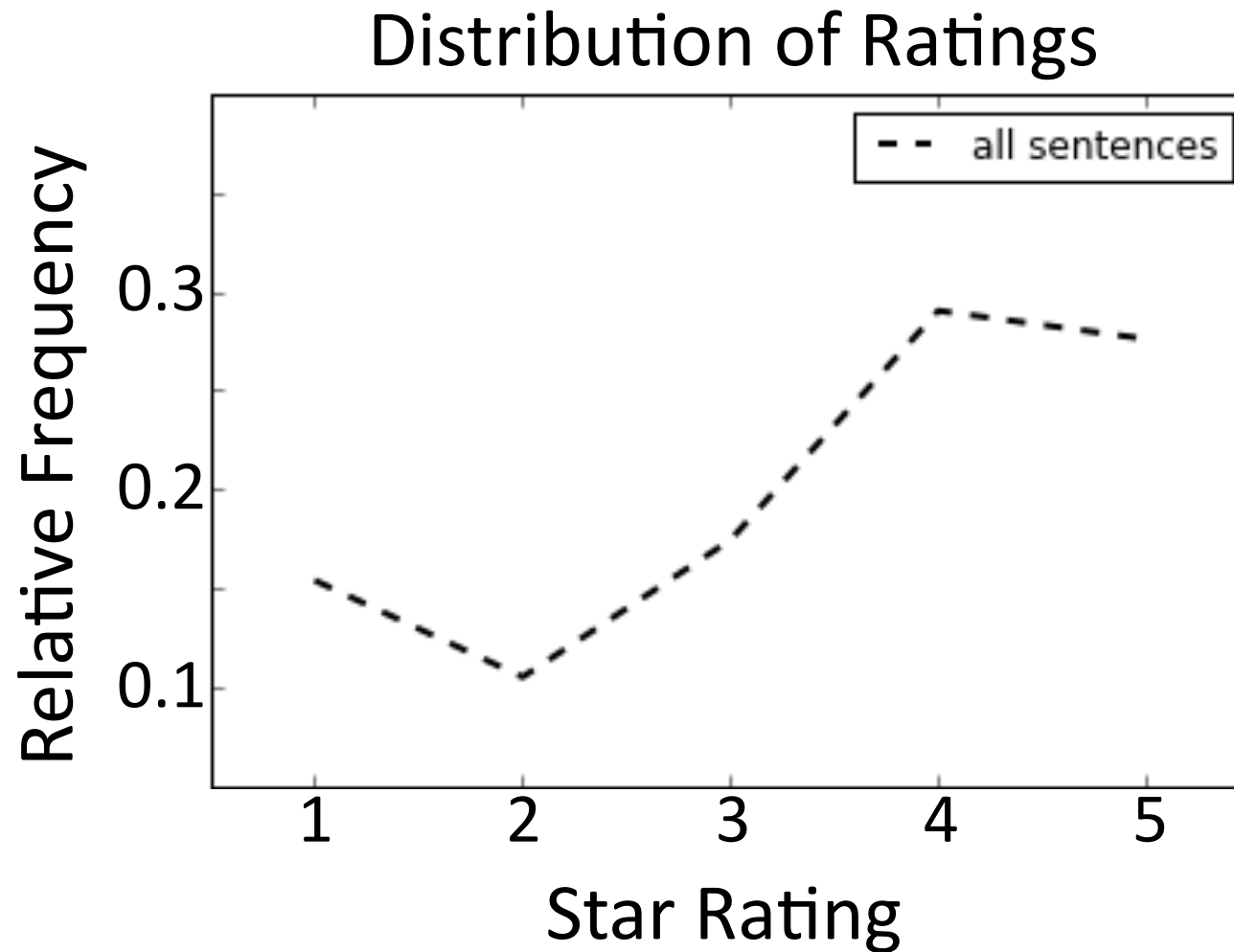


Extension to Sentences



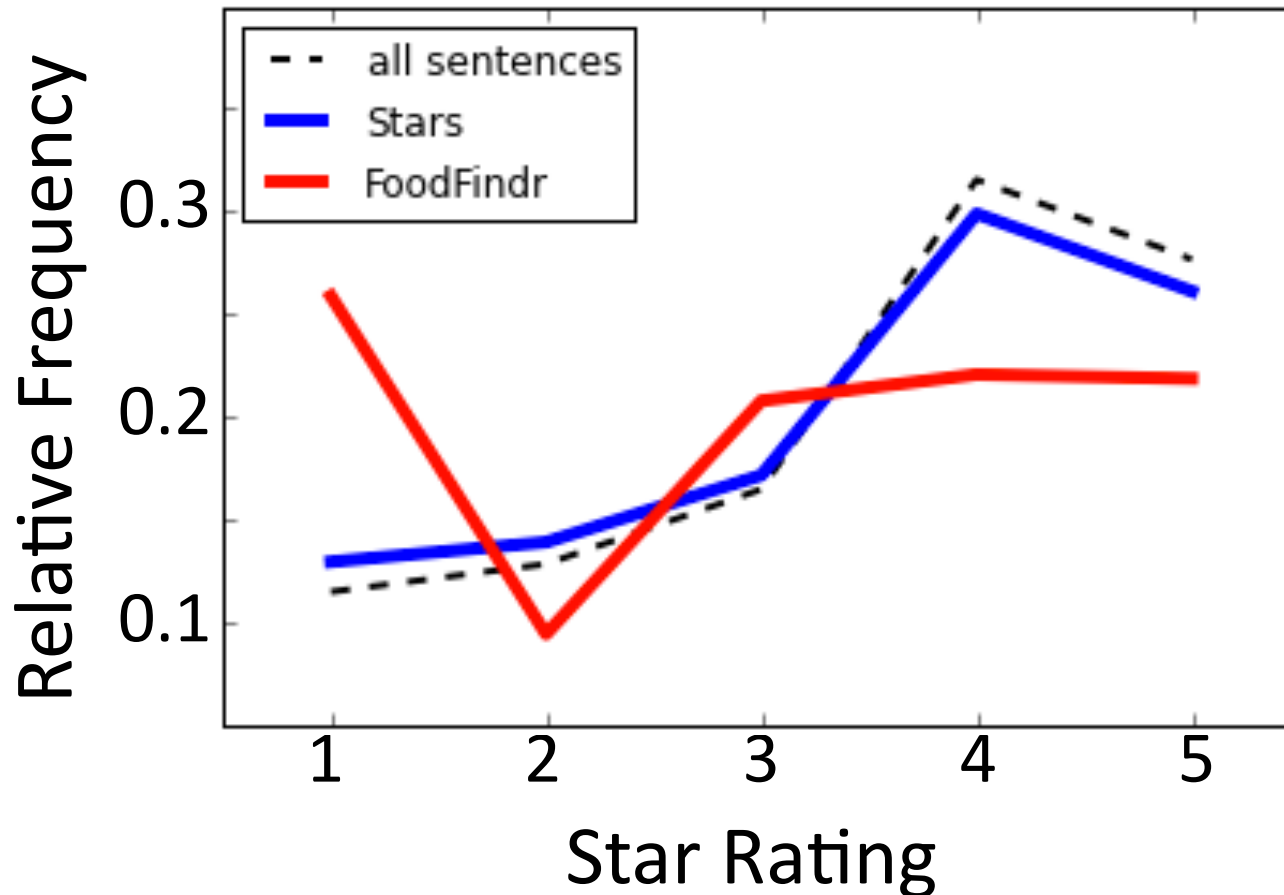
55% classification accuracy for full reviews, applicable to individual sentences.

Enhancing Customer and Business Experience



Enhancing Customer and Business Experience

Distribution of Ratings



**Food Findr successfully extracts sentiments associated with different common terms
Provides more precise review summary to customers.**

Enhancing Customer and Business Experience

Restaurant Name: Joyride Taco House

Category	Yelp Rating	FoodFindr Score
food	4.0	3.43055555556
atmosphere	4.0	4.2380952381
burrito	4.0	4.5
service	4.0	3.11267605634
drinks	4.0	3.53846153846

One review on the restaurant's Yelp page:

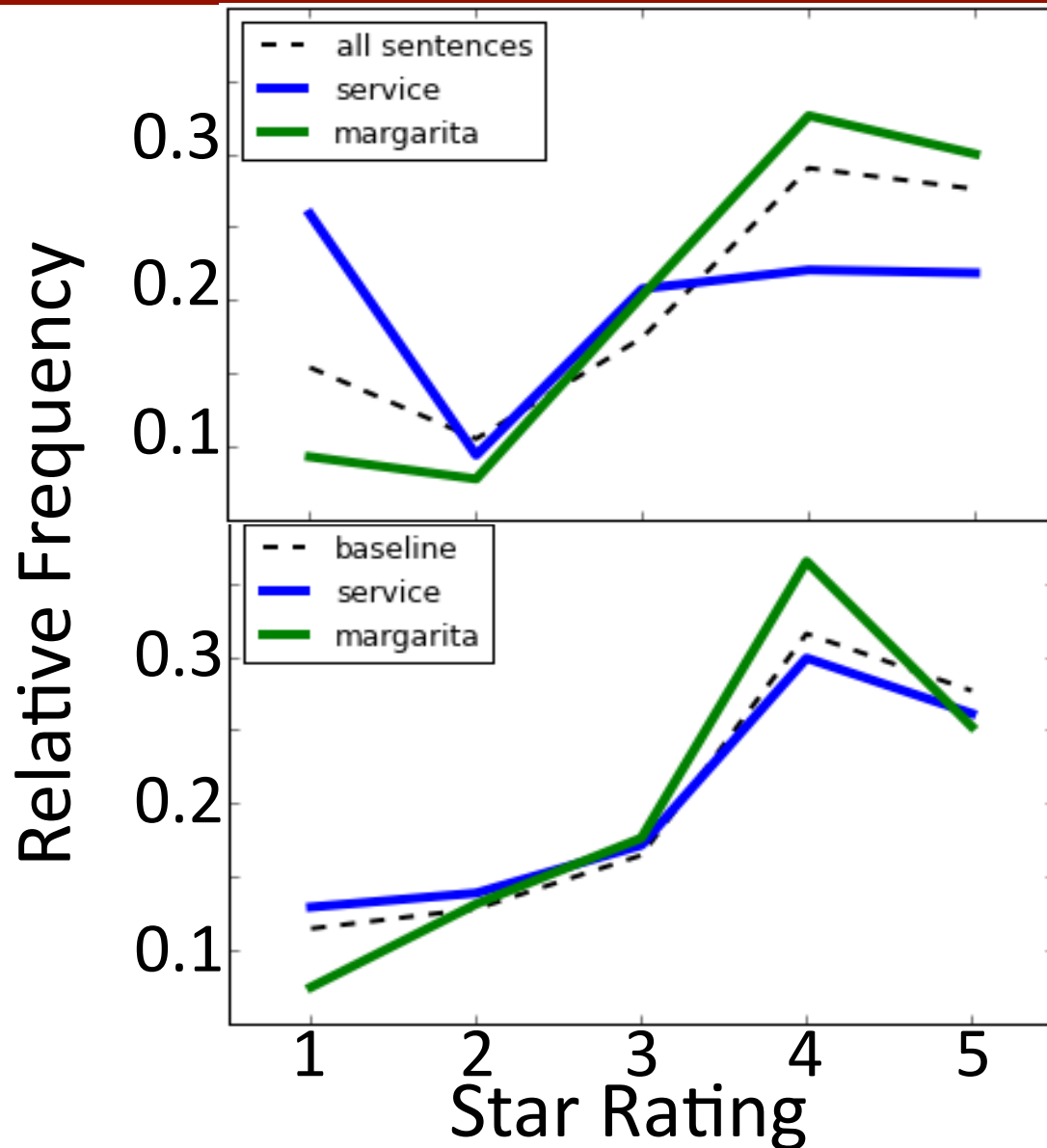
"It is super cute and I love the décor...

I have to say that the food is inconsistent...

I am still thinking about how good the veggie burrito is..."

**Food Findr successfully extracts sentiments associated with different common terms
Provides more precise review summary to customers.**

Improving Customer Experience



Food Findr pulls extracts sentiments out of reviews more effectively than the simpler thing to do.