

Task-1 Submission

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Introduction

In this task, I make a LDA analysis for review data present on yelp. To extracting topics from review, I adopt LDA methods and visualize the data I created.

Data I used

I selected 10000 yelp review records for this task.

Task1.1

In this task, I apply LDA for all selected records. After getting 10 Topic, each contains 15 words, I visualized my results.

The result of LDA analysis:

Topic 0

place great food good service love really friendly staff like time nice just ive breakfast

Topic 1

museum exhibit indian exhibits science buffet native american kids center naan adults body planetarium art

Topic 2

food sauce good place chicken fresh bbq meat thai great like just pork best delicious

Topic 3

food good like place just cheese got ordered order service time really dont didnt came

Topic 4

service time told customer just called like phone work minutes did said pizza make know

Topic 5

like just time place dont people im did said didnt know hair ive really going

Topic 6

place great phoenix time game like garden desert really fun nice just bar good center

Topic 7

food good place great fish mexican like chicken salsa chips just really service best sauce

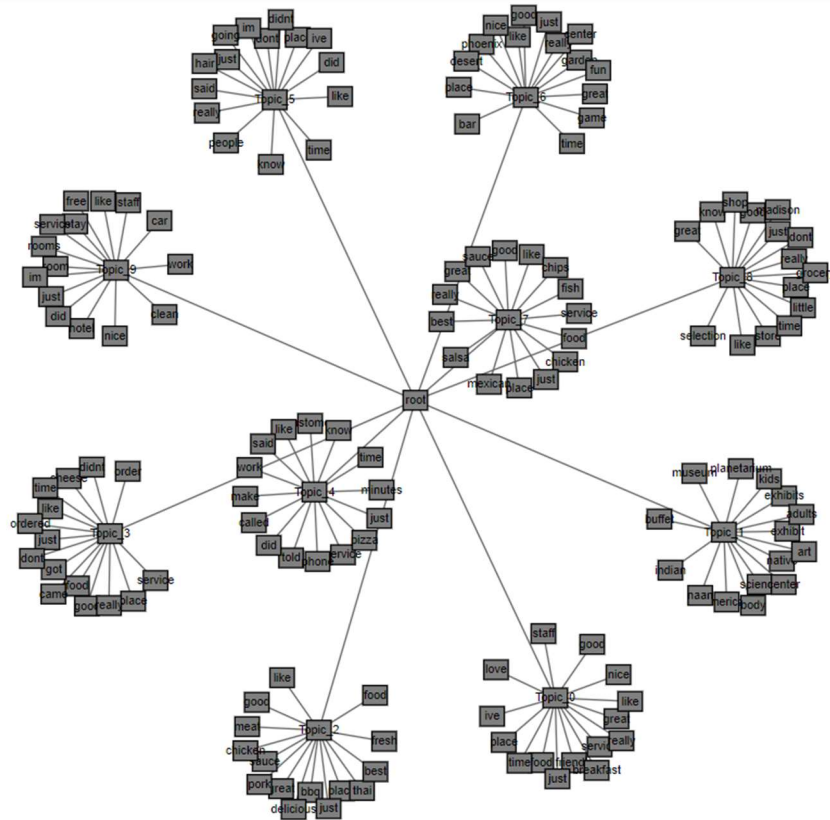
Topic 8

store good like really place selection just little great dont time madison grocery know shop

Topic 9

room car hotel stay clean just like nice rooms staff did service work im free

The Visualization:



Task1.2

In this task, I make another LDA analysis based on their ratings. I divided all selected records into two parts. I use blue to represent high rating records whose rating is larger than 2. Red color is used to represent the LDA results of low rating records, whose rating is smaller than 3. The results are as followed.

The LDA results for all high rating records:

Topic 0

great food place good service bar nice friendly staff room breakfast really time game hotel

Topic 1
fish fry service like friday place really good perch love beer cod lake night going

Topic 2
place like just great did time really ive im museum people nice know going art

Topic 3
time place great good game really center like just kids dont parking fun youre little

Topic 4
garden desert gardens beautiful botanical just time plants exhibit chihuly day place indian visit like

Topic 5
place good food just time like lunch im really little ive thai love great dont

Topic 6
good food place like great chicken just really sauce best service delicious cheese ordered try

Topic 7
great time cheese dont service good wine just place car want staff store ive know

Topic 8
car wash care minutes eggs dr time did took room little breakfast like didnt need

Topic 9
like place really nice great best just dont music know club love old beer area

LDA results for all low rating records:

Topic 0
food good place time like just really service got chicken ordered dont order went better

Topic 1
store service said customer told went car just called time like room business asked did

Topic 2
like just place good food sauce bbq didnt time ordered really service ribs sandwich dont

Topic 3
came food service table place just got time went didnt like car minutes told order

Topic 4
food place good like just ordered service fish better order mexican cheese im didnt got

Topic 5
time just appointment like day told im service order didnt make work location check new

Topic 6
place food really like bar good did going dont great time service say people old

Topic 7
time room just like im exhibit going know told old people new exhibits way money

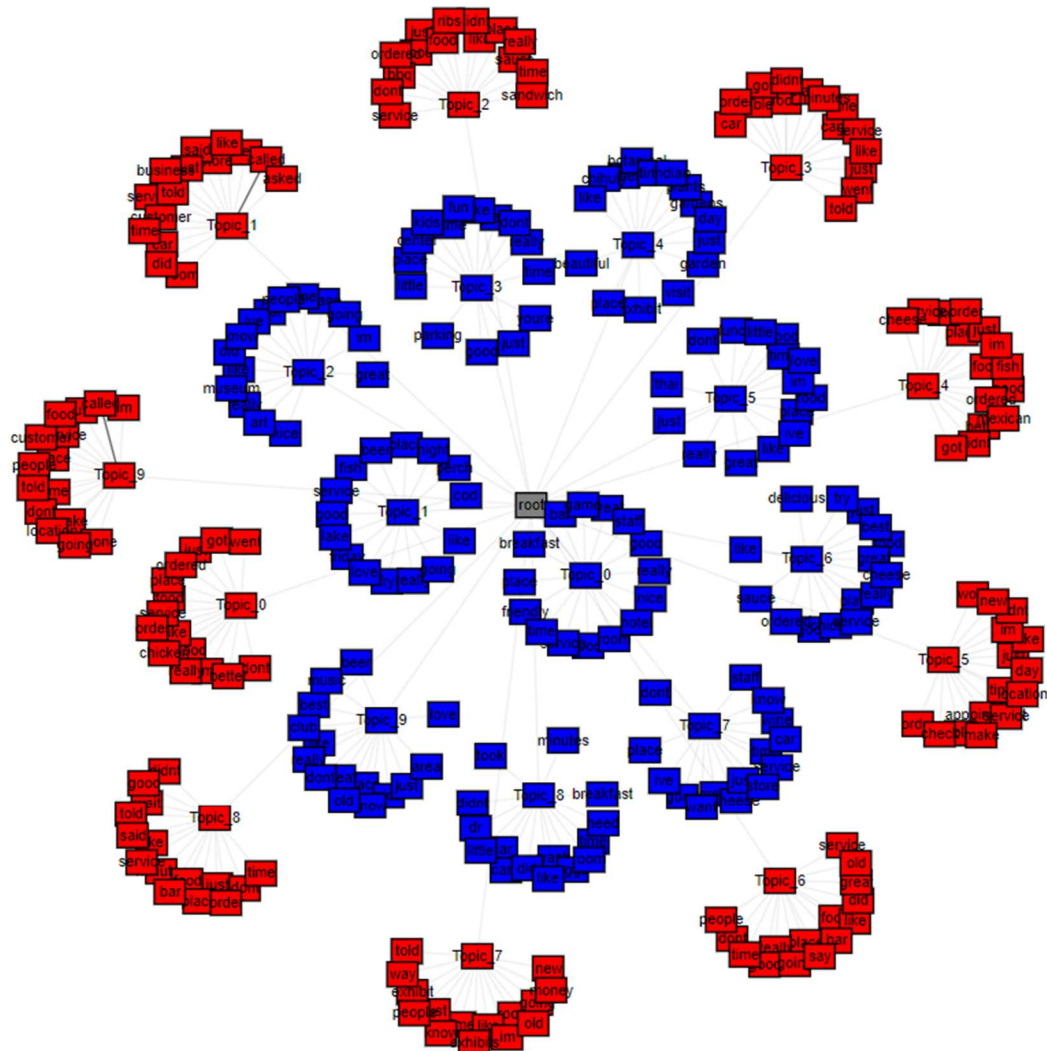
Topic 8

minutes just like food place wait dont service told order said didnt bar g
ood time

Topic 9

place time service people dont just make customer im location food phone t
old called going

The Visualization:



Besides, I also make word cloud for different group. The results are as follows.



Word cloud for high-ranking records



Word cloud for low-ranking records

Conclusion

As my results shows, most reviews focus on place and food of the a particular restaurant. Those high raking reviews often mention place and food related topic. However, some low-ranking reviews mention service restaurant. That is quite interesting, those restaurants that want to get higher ranking and better comments from yelp not only need to provide delicious food, but also to improve the quality of service.