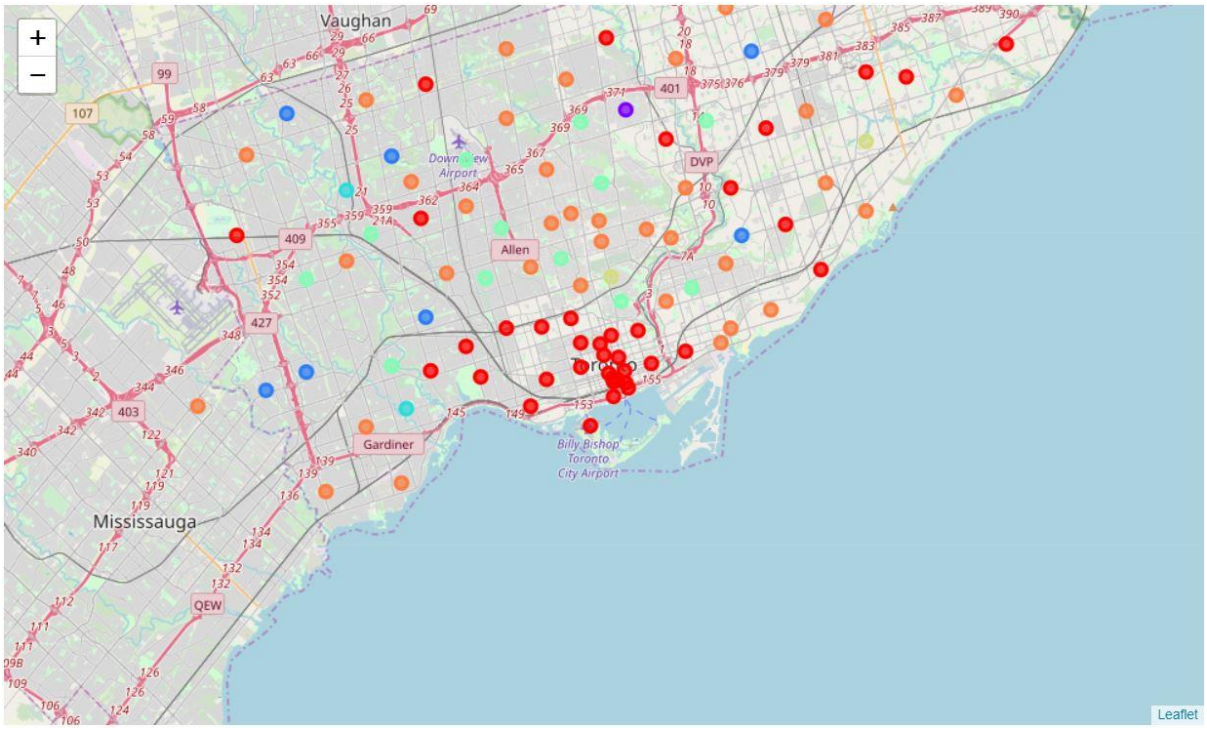
Introduction

Can we decide using some location Data to find an ideal place to start a restaurant?

Well, the answer is yes, using location data we can definitely figure out whether we need to open our restaurant in an open place or a place with more restaurant traffic. Whether the restaurant should be in a place which has restaurants with good ratings, as more foot traffic would be noticed. Imagine if your mind changes from a restaurant to a street food chain, well my fellow peers this same technique can be used to spot the areas where we would finally land our plans.



__This is a Clustered Map showing all the neighbourhoods in Toronto.__

Data and it’s preparation

The data i am using is the location data to Mumbai and its eating joints within a radius of 5 kilometres, this awesome data was made available by Foursquare API (Really powerful API).

I extracted the raw data in the form of Json text which was then converted to a Pandas Dataframe and Finally the Name, Latitudes and Longitudes of the food joint was taken to plot the amazing map.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```


__This data was tramsformed to a pandas dataframe(below).__

	name	lat	lng	id
0	Refresh Food Plaza, CST	18.940723	72.835401	5097a524498ecb7e5608a872
1	Food for Thought	18.932031	72.831667	4cfe22077f2db1f745873bd4
2	Food supplements online	18.933162	72.834570	5a06b0a77269fe0a9a40b515
3	Times Food Court	18.941978	72.834649	4e6a0ba5483bf2d9e609c9ac
4	BBC Good Food Magazine	18.941951	72.834451	53803a2d498e5da6507c877d
5	sai sagar fast food	18.943345	72.835021	4f4121bae4b0f6acbbec8786
6	Apna Fast Food Centre	18.964979	72.833901	4eeceb26e300215592df7587
7	Subkuchh Food Plaza	18.932608	72.835653	4e3ff3f8e4cdab9b93630774
8	Foods on Wheels - Food Delivery in Trains	18.929528	72.830633	5501522b498eed335750dcc5
9	grant house sea food resturant	18.946342	72.834698	5416b1e3498ec452903834d8
10	Food Fest	18.929958	72.827110	4ecdebc3722e01c57f8760c5
11	Food King	18.929958	72.827110	4ecdea912c5bc35054230bda
12	Bindal's Madhyantar fast food	18.941913	72.826450	51bc6c32498ef5b71a5d7d9b

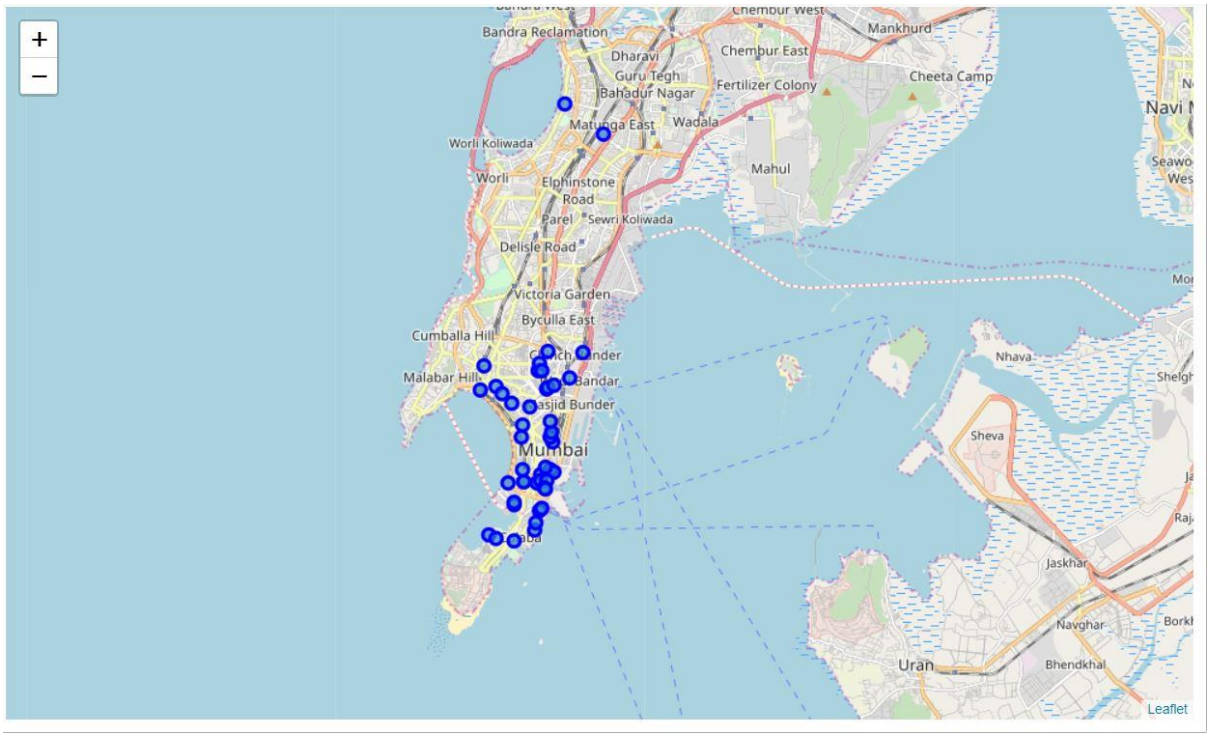
Methodology

No such Machine Learning algorithms were used in the solving of this problem.

So, essential steps for machine learning and data analysis such as Business understanding, analytical approach,etc. are not shown here.

Results

Well the Folium Library was used to visualize the result.



Discussion

From the above map of Mumbai we can clearly make out that Areas near Coulaba are really crowdy and have high foot traffic so a street food shop would definitely work in that are but area in the interior are not that crowded, so, these places are more suitable for a Restaurant.

Similarly, we can do so for many other situations, like if a person wants to setup his office, another wants to put up a shop, etc. One way or the other this analysis will be important for a person to find a place of his/her choice.

Conclusion

Concluding, I would like to thank Alex Aklson for a thorough Course Material and obviously my dear PEERS for helping in the discussion Forums.

Going through the course has really build up concepts in my mind and I believe that I will definitely benefit from it,

Thank You.