



Choosing the best spot to open a restaurant

PEDRO OLIVEIRA

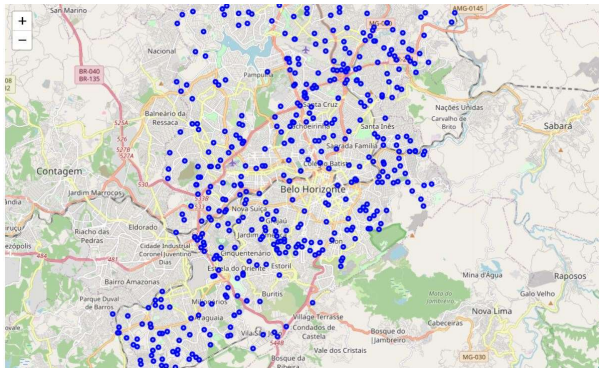
Vegan / Vegetarian Restaurant

- A client wants to know where is the best place to open a new Vegan / Vegetarian Restaurant in Belo Horizonte, MG, Brazil
- Get the neighborhood's list
- Get the neighborhood's coordinates
- Parse, clean and transform the data
- Find neighborhoods hotpots
- Define the best place

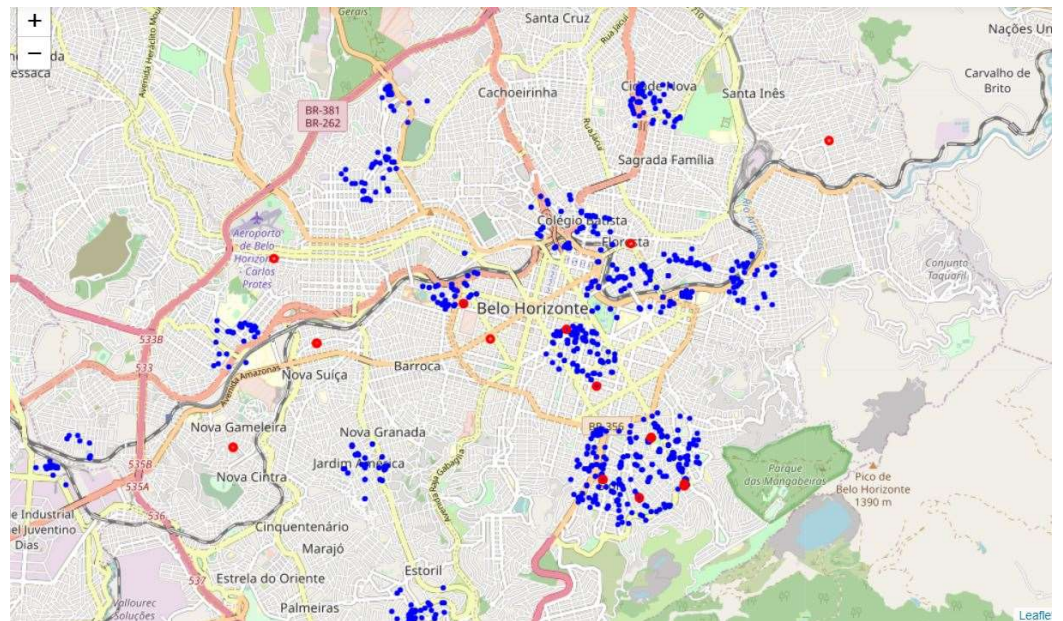
Data acquisition and cleaning

- Neighborhood's list from wikipedia site,
https://pt.wikipedia.org/wiki/Lista_de_bairros_de_Belo_Horizonte
- Parsing and cleaning the data
- Get neighborhood's UTM directions from BH's City Hall site,
<http://geocoder.pbh.gov.br/geocoder/0.0.1/address?bairro={ }>
- Clean, format and reindex with pandas library
- Transform the UTM direction into coordinates with pyproj library
- Data contain 496 rows and 5 columns

Creating maps

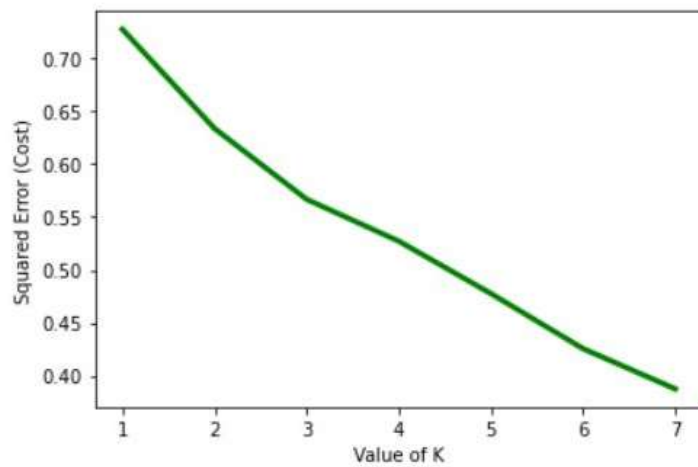


Neighborhood's Map

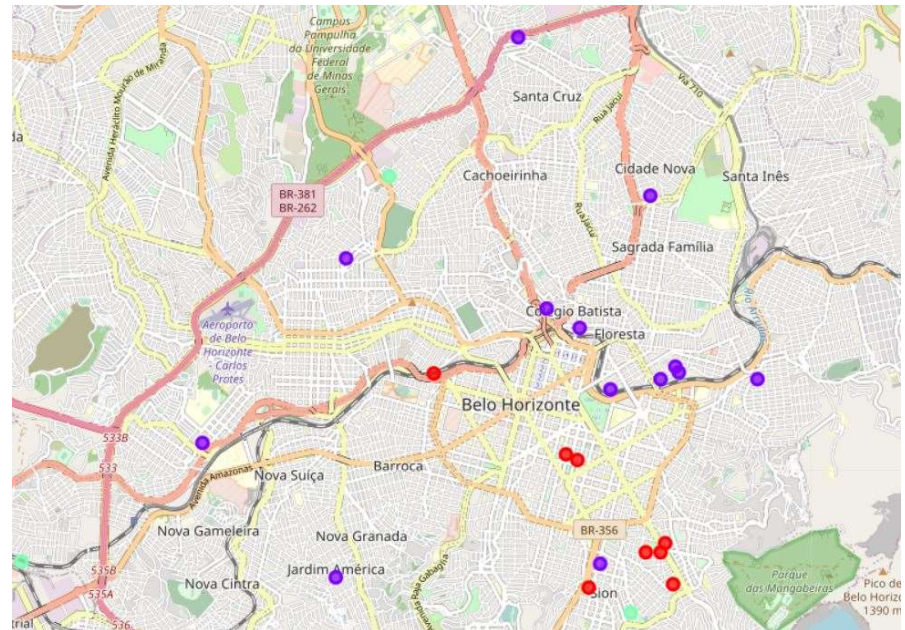


Hotspots of interesting neighborhoods and Vegan/Vegatarin Rest. Maps

Clustering

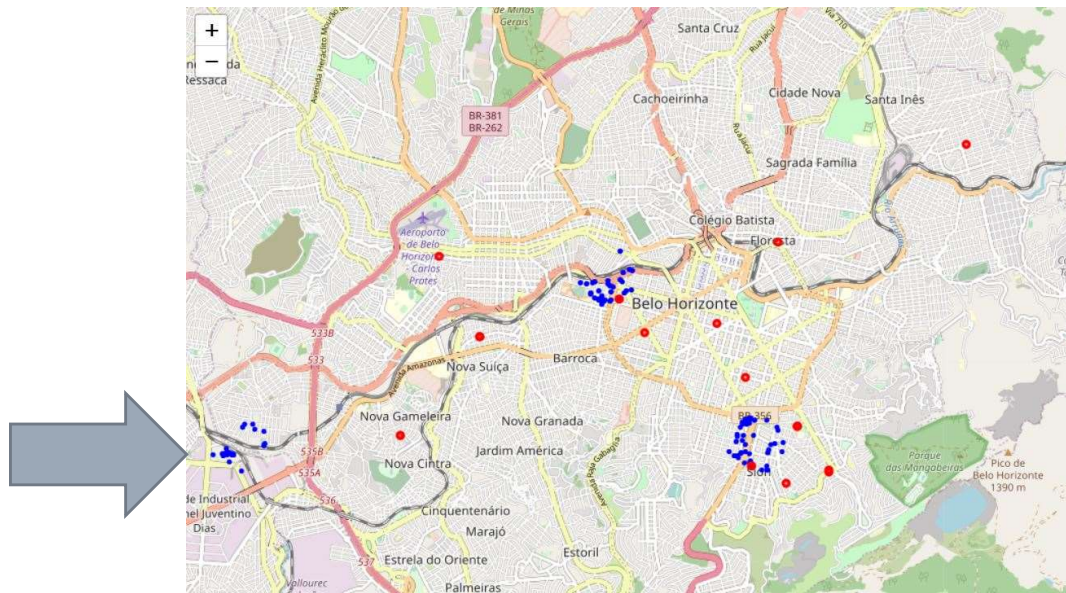


Choosing the optimal value for K



Clustered map

Conclusion



As we can see, although there is no Vegan/Vegetarian Restaurant in Carmo and Carlos Prates, there are some nearby them.

With this in mind, we can say that open this restaurant in Virginia would be the best alternative.