

Finding a location for new restaurants in Argentina

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Find the best location for new Argentinian restaurants in Argentina

- Argentina is well known with its great meat, and BBQ restaurant.
- We will try to detect locations for new one:
 - Not already crowded with restaurants, or with this specific Argentinian meat
 - As close to city center as possible
- Advantages of each location will then be clearly expressed for easily choose by stakeholders



Figure 1 - Argentinian original meat restaurant

Data acquisition and cleaning

- CSV data for Argentina's main cities (<https://simplemaps.com/> updated to 2020) - contains data for 503 cities (including 'name', 'lat', 'lon', 'population')
- Focused at cities with at least 50K people (70 cities)
- **geopy.geocoders** python package for generated algorithmically and approximate addresses of centers
- Number of restaurants and their type and location in every city will be obtained using **Foursquare API**
 - filtering 'food' category that are proper restaurants ('restaurant' in category name)
 - detect subcategories of Argentinian restaurant or BBQ category
 - within a radius of 1000 meters from the cities center

Data acquisition and cleaning

	City	City Latitude	City Longitude	restaurant	restaurant Latitude	restaurant Longitude	restaurant Category	dist2center
0	Buenos Aires	-34.60828	-58.372295	Pertutti	-34.609195	-58.373392	Argentinian Restaurant	142.875942
2	Buenos Aires	-34.60828	-58.372295	Piazzolla Tango	-34.606099	-58.374899	Theme Restaurant	340.024866
3	Buenos Aires	-34.60828	-58.372295	FuraiBo	-34.610105	-58.372549	Japanese Restaurant	203.750072
7	Buenos Aires	-34.60828	-58.372295	Elauge Hermanos	-34.609276	-58.375499	BBQ Joint	313.927511
8	Buenos Aires	-34.60828	-58.372295	Bidou de la Merced	-34.605619	-58.373134	Restaurant	305.112268
...
1041	Ushuaia	-54.80720	-68.304400	Parrila La Rueda	-54.805330	-68.301049	Steakhouse	299.601331
1043	Ushuaia	-54.80720	-68.304400	Bamboo	-54.805051	-68.299648	Chinese Restaurant	388.071016
1050	Azul	-36.78330	-59.850000	Parrilla El Carrito	-36.789406	-59.858032	BBQ Joint	986.483509
1054	Cruz del Eje	-30.73330	-64.800000	Viejo Munich	-30.736909	-64.791571	German Restaurant	900.942656
1055	Cruz del Eje	-30.73330	-64.800000	El Cardon	-30.737260	-64.791606	BBQ Joint	915.979304

535 rows × 8 columns

Data acquisition and cleaning



An example of the restaurant's span in the city of Bariloche; Argentinian meat restaurants (in red) vs. regular restaurants (in blue). The city center is signed with a black mark

Córdoba

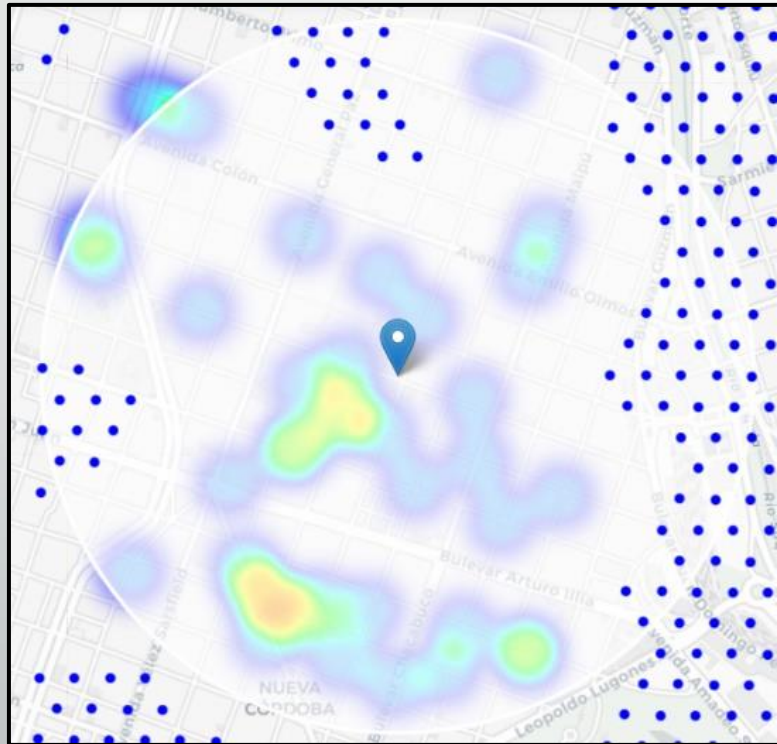
- Using Foursquare, there are 9 local restaurants in Córdoba, 22.0% from all the restaurants near the center (41).



left: The restaurant's span in the city of Córdoba; Argentinian meat restaurants (in red) vs. regular restaurants (in blue). The city center is signed with a black mark; right: Heatmap zoom-in

Córdoba

- locations with no more than two restaurants in radius of 250m, and no Argentinian meat restaurant closer than 300m.



The blue dots represent the location that satisfied the two conditions

Córdoba

- Using K-mean algorithm to find those centers
- We found 4 locations' centers within 1.5km from the city center:
 - a. Avenida Pueyrredón, 176 (1.3km)
 - b. Avenida 24 de Septiembre, 843 (1.2km)
 - c. Bahía Blanca, 899 (1.3km)
 - d. Avenida Intendente Mestre Norte, 444 (1.3km)



The centers of the good locations around the city center

The neighborhood of Güemes, Córdoba

- The neighborhood of Güemes, near Avenida Pueyrredón, will be a good place
- Filled with fancy local bars, trendy cafes, and restaurants, this neighborhood will keep you busy



Güemes Neighborhood

Conclusion

- The purpose of this project was to identify Cities in Argentina that has good potential to open new Argentinian meat restaurant.
- We focused our analysis to the city of Córdoba
- By calculating restaurant density distribution from Foursquare data, filtering locations which satisfy our requirements and clustering them – we found Guemes as a zone of interest to be used as starting points for final exploration by stakeholders
- Final decision will be made by stakeholders based on other specific characteristics (attractiveness, real estate availability, prices, etc.)