Evaluation of best localization for a Vietnamese baguette/bubble tea restaurant in Versailles-France

### Objectives

- Suggest better places for Vietnamese baguette/ Bubble tea
  - ▶ Target breakfast and lunch worker/student
  - ► Find place with less competitors possible
- Create a model that can be used for other business case

### Data acquisition and cleaning

- Foursquare API
  - Restaurant/Venues: We can then identify cluster area; we will also identify the direct competitors.
  - Companies/universities: In order to identify potential customer.
- Google API : reverse geolocalization
- Clean dataset contains also derivative feature (number of customers)

### Dataset

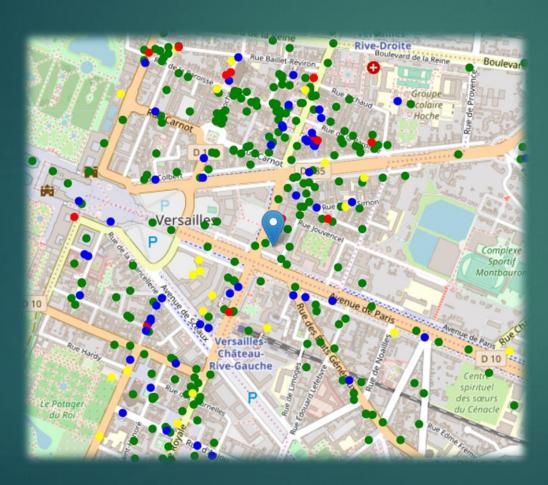
#### Out[22]:

	Address	Latitude	Longitude	X	Υ	Distance from center	Customers in area
13	14 Rue Royale, 78000 Versailles	48.797908	2.126438	-444302.447468	5.485443e+06	624.376715	19
65	4 Rue au Pain, 78000 Versailles	48.806257	2.131099	-443802.447468	5.486309e+06	399.326338	17
76	3 Impasse Duplessis, 78000 Versailles	48.807927	2.132031	-443702.447468	5.486483e+06	594.461582	15
57	48 Avenue de Saint-Cloud, 78000 Versailles	48.805190	2.135477	-443502.447468	5.486136e+06	453.363514	13
64	15 Rue Carnot, 78000 Versailles	48.805955	2.128443	-444002.447468	5.486309e+06	399.326338	13
75	37 Rue de la Paroisse, 78000 Versailles	48.807625	2.129376	-443902.447468	5.486483e+06	559.807621	13
56	Europe Saint-Cloud, 78000 Versailles	48.804889	2.132822	-443702.447468	5.486136e+06	292.469615	12
66	63 Rue de la Paroisse, 78000 Versailles	48.806558	2.133754	-443602.447468	5.486309e+06	489.348060	10
6	23 Rue Benjamin Franklin, 78000 Versailles	48.797445	2.136125	-443602.447468	5.485270e+06	718.277964	9
83	19 Rue des Réservoirs, 78000 Versailles	48.808692	2.124997	-444202.447468	5.486656e+06	792.027538	8

## Versailles analysis grid



# Customers and Competitors mapping



Green: Companies, Yellow: Universities

Blue: Restaurants

Red: Asian Restaurants

# Customers and Competitors heatmap



### Good localisation heatmap



The criterias will be:

Maximum 2 restaurants within grid.

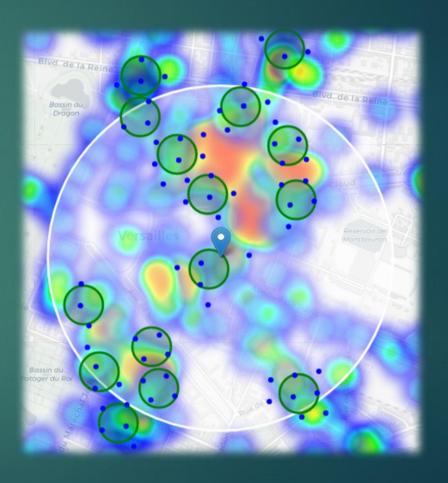
No Asian restaurant within 100 meters radius.

More than 10 customers in grid.

### Clustering and centroids address

#### Addresses of centers of areas recommended for further analysis

18 Rue Richaud, 78000 Versailles => 0.5km from Prefecture 4 Place Saint-Louis, 78000 Versailles => 0.7km from Prefecture 36 Rue des États Généraux, 78000 Versailles => 0.6km from Prefecture 12 Rue Hoche, 78000 Versailles => 0.5km from Prefecture Rue Du Pont Colbert Résidence Micis 19 B, 78000 Versailles => 0.1km from Prefecture 20 Boulevard de la Reine, 78000 Versailles => 0.8km from Prefecture 48 Rue du Maréchal Foch, 78000 Versailles => 0.9km from Prefecture 19 Rue du Vieux Versailles, 78000 Versailles => 0.6km from Prefecture 44 Avenue de Saint-Cloud, 78000 Versailles => 0.4km from Prefecture 27 Rue Royale, 78000 Versailles => 0.6km from Prefecture 21B Avenue de Saint-Cloud, 78000 Versailles => 0.3km from Prefecture 14 Rue Baillet Reviron, 78000 Versailles => 0.6km from Prefecture 10 Avenue de Sceaux, 78000 Versailles => 0.5km from Prefecture 16 Rue de la Paroisse, 78000 Versailles => 0.7km from Prefecture 18 Rue de l'Occident, 78000 Versailles => 0.8km from Prefecture



### Conclusion and final words

- Built a model to suggest future restaurant localisation
- ▶ Model can be improved, by weighted customers for example