

**Predicting the best
Gilets Jaunes'
demonstration
localization to limit
material damages in
Paris**



Issue :

- 5 months that *Gilets Jaunes* are demonstrating in Paris.
- Some are pacific whereas an increasing number of "black blocs" are decimating the old neighborhoods of the town, trashing streets and buildings and specifically targeting **Gastronomic Restaurants, Luxury shops and other so-called symbolic places.**
- Global cost for France > hundreds thousands €

Recipients for this project :

- Paris Administration of Demonstrations
 - Paris Citizens
- Pacific Gilets Jaunes who wish to stop the spreading violence

Data:

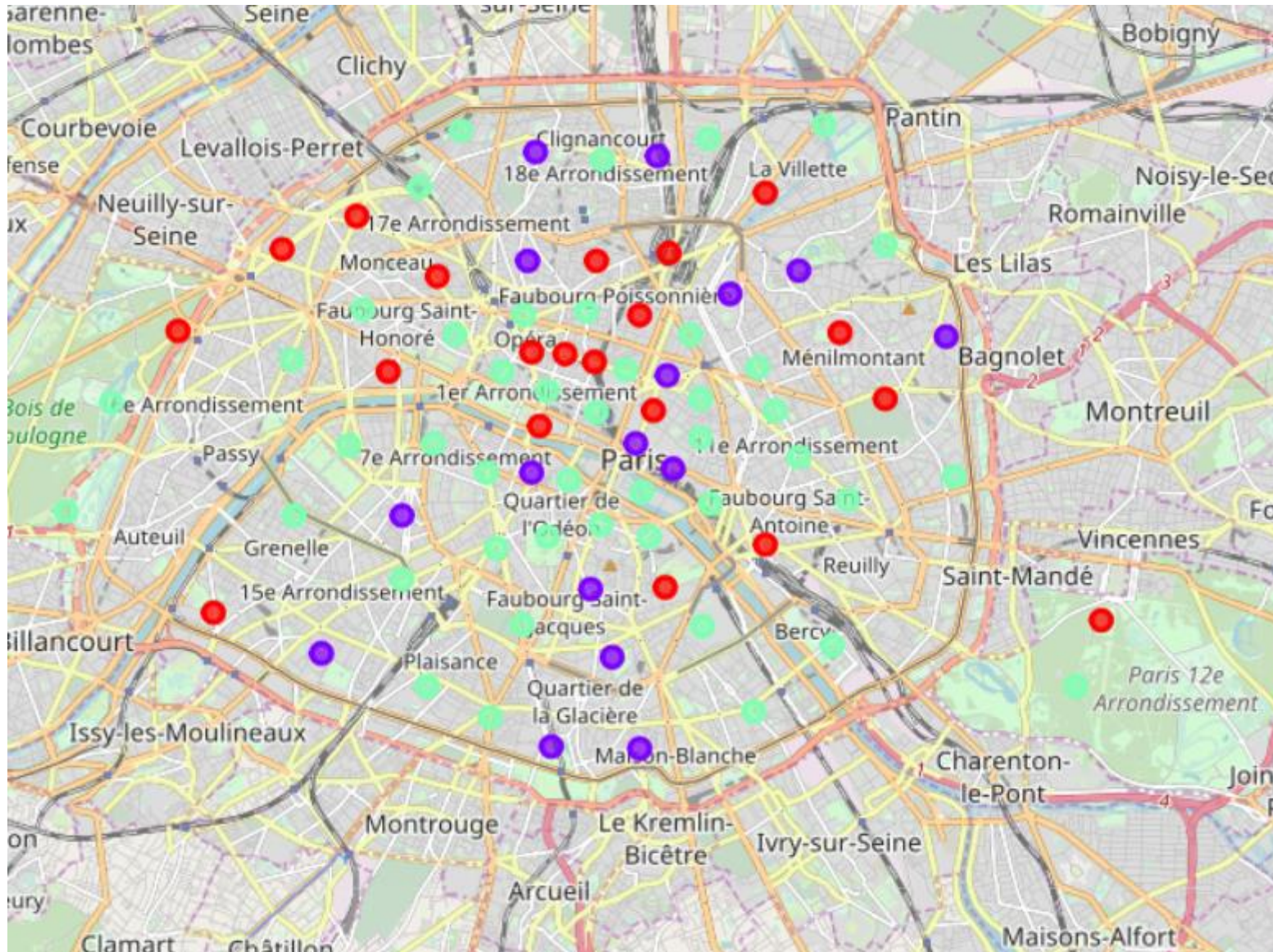
From opendata.fr and INSEE


Borough	Neighborhood	Latitude	Longitude	Poverty	Median_Life_Level
3	Enfants-Rouges	48.863887	2.363123	12.643554	30988.000000
4	Notre-Dame	48.852896	2.352775	11.763913	30514.666667
5	Jardin-des-Plantes	48.841940	2.356894	10.678701	32950.000000
7	Saint-Thomas-d'Aquin	48.855263	2.325588	8.100699	41949.000000
9	Faubourg-Montmartre	48.873935	2.343253	11.894139	32771.000000

Most common venues in some neighborhoods:

Borough	Neighborhood	Poverty	Median_Life_Level	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	3	2.363123	12.643554	2	Art Gallery	Wine Bar	Clothing Store	Café	Bistro	Hotel	Coffee Shop	Sandwich Place	Boutique
1	4	2.352775	11.763913	2	French Restaurant	Ice Cream Shop	Japanese Restaurant	Bakery	Plaza	Historic Site	Wine Bar	Creperie	Garden
2	5	2.356894	10.678701	0	French Restaurant	Hotel	Science Museum	Garden	Museum	Café	Botanical Garden	Bakery	Greek Restaurant
3	7	2.325588	8.100699	2	French Restaurant	Hotel	Café	Italian Restaurant	Bakery	Coffee Shop	Historic Site	American Restaurant	Tailor Shop
4	9	2.343253	11.894139	2	French Restaurant	Hotel	Wine Bar	Thai Restaurant	Burger Joint	Italian Restaurant	Cocktail Bar	Creperie	Bar

First results:



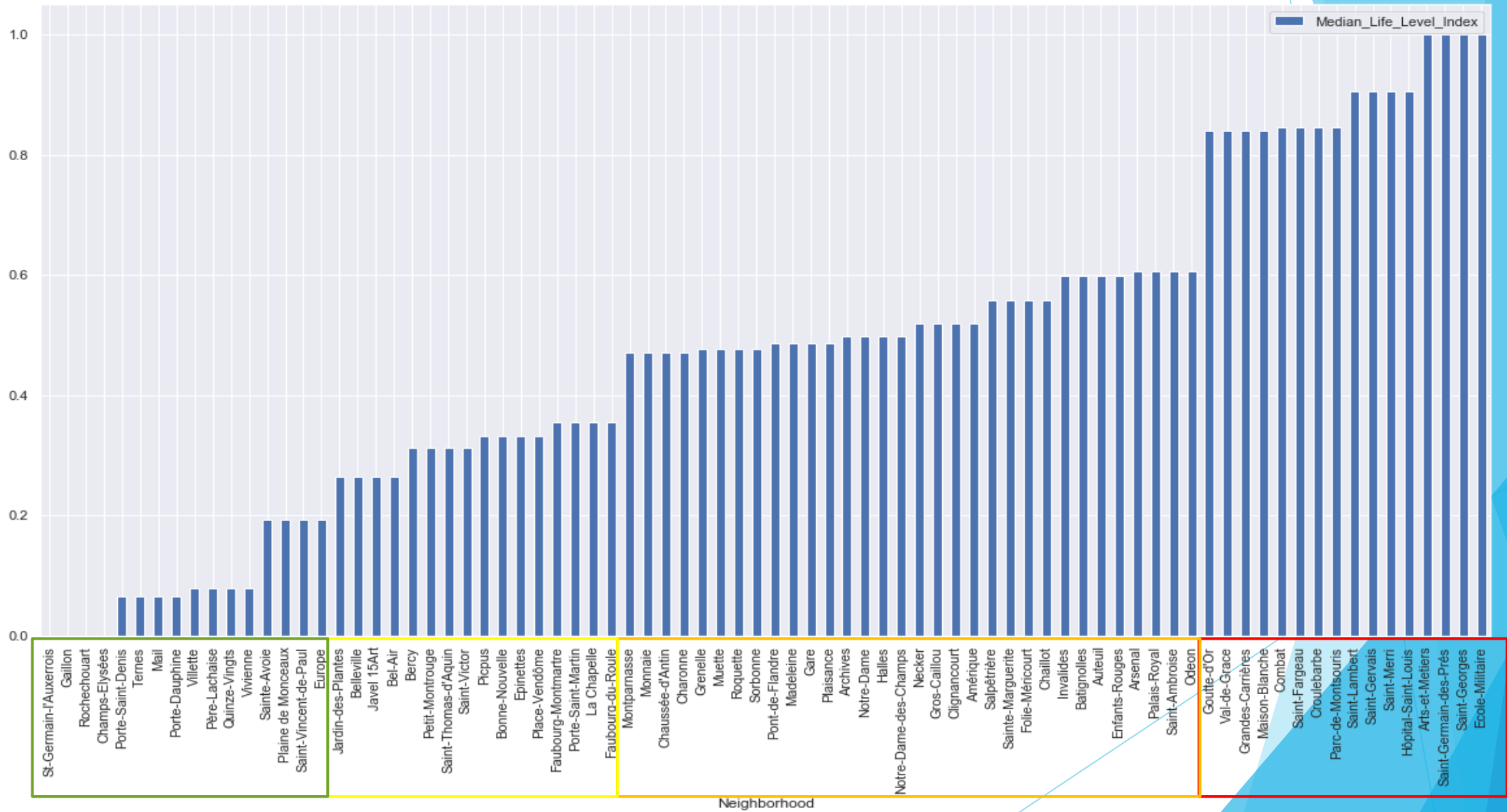
 More susceptible to be damaged

BUT :

Distinction difficult between clusters

Possible solution : Use of supervised algorithms based on the median life level index

Median Life Level Index:



Last results:

Algorithm	Jaccard	F1-Score
kNN	0.1875	0.128571
Decision Tree	0.3125	0.302083
SVM	0.1875	0.059211
Logistic Regression	0.1875	0.059211

VERY LOW ACCURACY

Discussion & Conclusions

- Not enough relevant data to make a proper analysis and give a real solution
- Venues are not sufficient to determine the damages. We need instead the turnover of the shops, restaurants, hotels, etc.
- The cluster “Red” could be the more damaged BUT needs confirmation.
- TO BE CONTINUED ! 😊