A tourist guide based on unsupervised learning clustering techniques

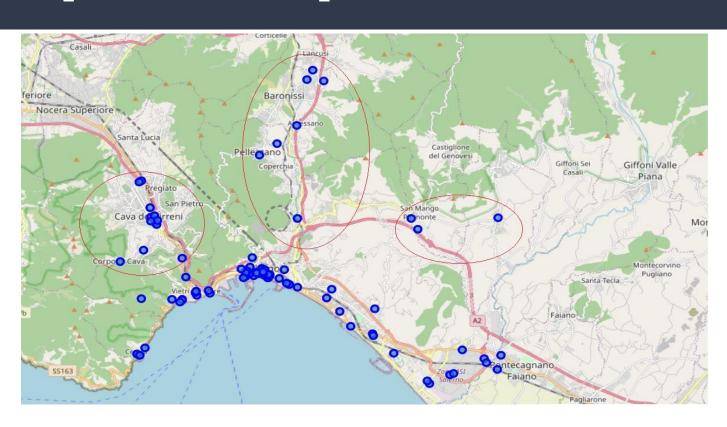
Mission

- Use Geodata and Clustering to create a tourist guide
- The study is made on geodata from the city of Salerno (IT) and near locations
 - The city was chosen because tourism produces high revenues

Data Processing

- Data acquired from Foursquare.com
- From dataset were extracted only few essential features
 - Venue Name, Address, Latitude,
 Longitude, Venue Category
- Addresses sometimes were inaccurate and bad formatted
 - They were well formatted and adjusted
- Some values were dropped

Dataset plotted on map



K-Means Clustering

- Simple to understand
- Fast to cluster
- Easy to implement
- Always yields a result

Clusters on map



Quick Clusters Recap

	1st M.C.V.	2nd M.C.V.	3rd M.C.V.
Cluster 0	Hotel	Waterfront	Ice Cream Shop
Cluster 1	Ice Cream Shop	Waterfront	Electronics Store
Cluster 2	Cafè	Waterfront	Electronics Store
Cluster 3	Italian Restaurant	Ice Cream Shop	Hotel
Cluster 4	Pizza Place	Waterfront	Electronics Store

M.C.V.: Most Common Value

Conclusions

- Built a system of clusters which addresses tourists for their vacations
- Anyway a more rich and accurate dataset could help to achieve a better result