# COURSERA CAPSTONE PROJECT

THE BATTLE OF NEIGHBORHOODS: COFFEE SHOP ON MILAN

# INTRODUCTION

- Milan is the economic capital of Italy, it is also one of the most beautiful city of world, it newer sleep and there is a lot of things to do every hours. Every day a lot of tourist, after a long walk, would like to take a rest and drink a good Italian espresso.
- so can we ask ourselves where it would be convenient to open a new coffee shop?

# **BUSINESS PROBLEM**

- The objective of this project is to analyze and select the best locations in Singapore to open a new coffee shop. Using data science methodology to provide business solution.
- The project goal is to aim entrepreneurs interested in opening a new business in the center of Milan

#### DATA

We focus our analysis on the coffee shop category. We get the data as JSON from FourSquare API and then we put the interested features in a pandas dataframe that will be binded on a Folim Geographic Information System. Every row of dataframe represents a coffee shop, its location and a short description of what it offer.

90	uid	name	shortname	address	postalcode	lat	Ing
0	58b5d3364e31c52f888a0bed	Starbucks Reserve Roastery	Coffee Shop	[Piazza Cordusio 3 (Via Orefici), 20123 Milano	20123	45.464920	9.186153
1	5485c0d7498e225e0587b79b	Panini Durini	Sandwiches	[Via Mengoni 4, 20121 Milano Lombardia, Italia]	20121	45.465238	9.188590
2	59c2232bd48ec17dd4178369	Lavazza Coffee Design	Coffee Shop	[Piazza San Fedele, 2, 20122 Milano Lombardia,	20122	45.466274	9.190975
3	576828cc498ec1d7fb395d70	Caffè Napoli	Café	[Via Gaetano Giardino 1, 20123 Milano Lombardi	20123	45.462816	9.189023
4	4be181c240d676b02de504ee	Princi	Bakery	[Via Speronari, 6, 20123 Milano Lombardia, Ita	20123	45.463029	9.187968

# METHODOLOGY

We can analyze the map of Milan and with the help of heatmap-based kernel density estimation we can verify the area were there is a low influence of other coffee shop.



# **RESULTS**

Based on the map result we can locate as a good location for new coffee shop the south-west side of Duomo Cathedral where which is an entrance to center and where is a lot of shop and office.



# DISCUSSION

As shown on the map, there is no coffee shop on Piazza Fontana and in the nearby. This represents a great opportunity and high potential area to open a new coffee shop as there is very little to no competition from existing coffee shop.

#### CONCLUSION

- With data science methodology we can take etherogeneous data and analyze it to show the best location for a new business opportunity.
- The analysis can be improved by adding data such as the proximity of schools or shopping centers and the connection with public transport

