## Coursera Platform IBM Data Science Professional Certificate

## Applied Data Science Capstone (Find similar business approach)

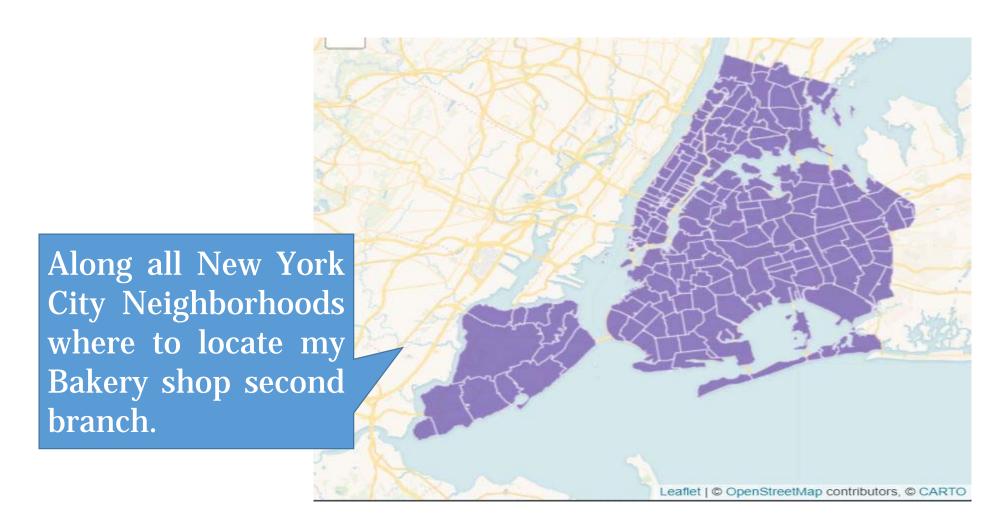
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#### Introduction

 How Machine Learning Could help a businessman find appropriate neighborhoods to open the second branch of his bakery shop after the success of the first branch in Downtown, Brooklyn.



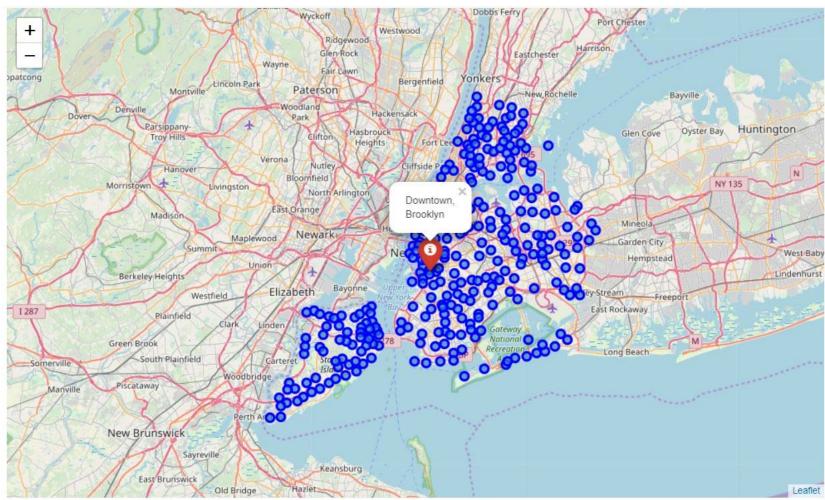
#### **Business Problem**



### Data acquisition

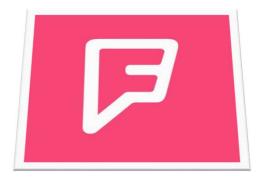
Using New York neighborhoods data and Foursquare Places Database we can analysis, visualize and result comprehensive observations

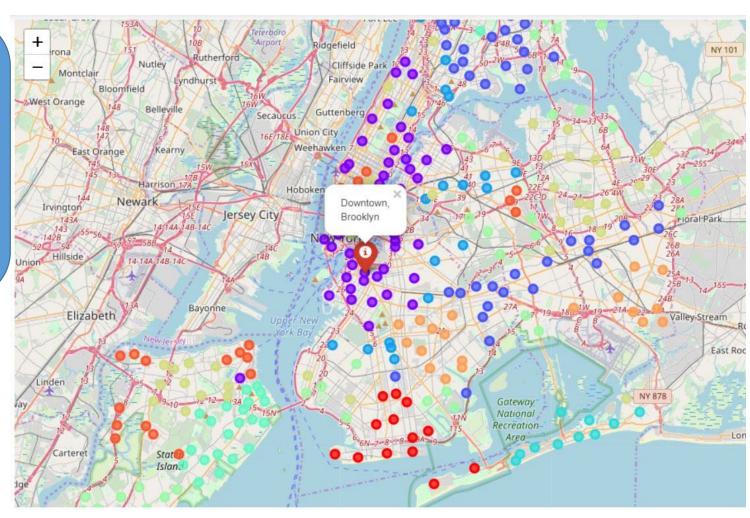




## Methodology

Using machine learning to make clustering of New York neighborhoods according to foursquare venues data, then pick the cluster contain Downtown, Brooklyn which indicate the similarity of these neighborhoods.



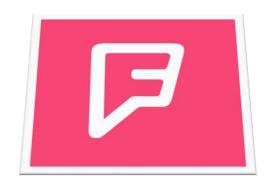


### Methodology

Within the neighborhoods cluster contain Downtown, Brooklyn will again retrieve foursquare data for Bakery category only, then sort data ascending just to output the neighborhoods lack of the required service.

	Neighborhood	Cluster Labels	Borough	Latitude	Longitude	Bakery_Count
28	Queensboro Hill	2	Queens	40.744572	-73.825809	2.0
33	Turtle Bay	2	Manhattan	40.752042	-73.967708	5.0
37	Whitestone	2	Queens	40.781291	-73.814202	5.0
8	Clinton	2	Manhattan	40.759101	-73.996119	7.0
27	Park Slope	2	Brooklyn	40.672321	-73.977050	8.0





#### Result



Thanks for you attention.

# For full project repository and project code, feel free to refer to below GitHub link

https://github.com/EngineerMMostafa/Coursera Capstone