

## Capstone Project: Deciding the Next Location of a Popular Chain Restaurant

**Background:** A growing Italian restaurant chain is looking to open a new location. So far, restaurants have been located in the Canadian cities of Quebec, Quebec City, Vancouver, and Ottawa. Now, the restaurant's founder is thinking about expanding to the US through a New York location. However, she's wondering if she should hold off on an international expansion for now and instead locate the new restaurant in Toronto. Moreover, once she decides between New York and Toronto, she needs to select the best neighborhood to open the restaurant in.

**Problem:** In order to answer the question, "Where should the new restaurant in the growing Italian restaurant chain be located?", the founder needs access to some key information about Italian restaurants in the cities of New York and Toronto. This includes the amount of Italian restaurants in each city relative to their size, the individual neighborhoods with the most/least Italian restaurants, and the rankings of said restaurants.

**Data:** In order to solve this problem, I plan to scrape data containing New York and Toronto's neighborhoods and boroughs from open data sources. I will then find the longitude and latitude of these locations through the Python Geocoder package. In order to obtain information about Italian restaurant venues, I will use the Foursquare API, which provides data about venue locations, rankings, ratings, and user comments, among other things.

**Importance:** It is crucial for my client to access data on existing Italian restaurants in these cities because learning from this information is the best way to come to a decision that will ensure the success of the new restaurant. My client would not want to choose the new location without knowing that the choice she is making will likely lead to higher profits for the franchise. Therefore, she would be interested in viewing data that will indicate which city/neighborhood is the most economically viable choice.