## Data Science Conference in New York

#### Introduction

The Hut Group is a company based in New York, USA is organizing event for 2 days for a group of Data Scientists from all over the world. The company has to put a good program, including a hotel of residence, a hall for meetings, places of landscape to visit, stores for shopping, restaurants, carparks and cafes. So the company's purpose is to make a list of places of landscape in New York, including the nearest restaurants, cafes, and shopping stores for each place.

### **Data Description**

The data used in this project is provided by Foursquare location data. The data are grouped by landscape area, and each area included the information about this area and all information about restaurants, cafes, and stores which in this area.

### **Project Flow**

- 1. Import Libraries
- 2. Define Foursquare Credentials
- 3. Define the city and get its latitude & longitude
- 4. Search for Hotels & clean dataframe
- 5. Search for Park & clean dataframe
- 6. Search for Restaurants & clean dataframe
- 7. Search for Shopping Stores & clean dataframe
- 8. Generate map to visualize hotels, shopping stores, Parking and Restaurant and how they cluster together

#### Hotel Search

|   | name                                 | categories | address                  | lat       | Ing        | postalCode | state |
|---|--------------------------------------|------------|--------------------------|-----------|------------|------------|-------|
| 0 | The Beekman – A Thompson Hotel       | Hotel      | 123 Nassau St            | 40.711173 | -74.006702 | 10038      | NY    |
| 1 | The Roxy Hotel                       | Hotel      | 2 Avenue of the Americas | 40.719341 | -74.005044 | 10013      | NY    |
| 2 | Four Seasons Hotel New York Downtown | Hotel      | 27 Barclay St            | 40.712612 | -74.009380 | 10007      | NY    |
| 3 | Smyth Hotel                          | Hotel      | 85 W Broadway            | 40.715144 | -74.009183 | 10007      | NY    |
| 4 | Walker Hotel Tribeca                 | Hotel      | 396 Broadway             | 40.718481 | -74.002469 | 10013      | NY    |

## Park Search

|   | name                 | categories | address                    | lat       | Ing        | neighborhood        | postalCode | state |
|---|----------------------|------------|----------------------------|-----------|------------|---------------------|------------|-------|
| 0 | City Hall Park       | Park       | 17 Park Row                | 40.712415 | -74.006724 | NaN                 | 10038      | NY    |
| 1 | Union Square Park    | Park       | btwn Broadway & Union Sq E | 40.735170 | -73.990667 | NaN                 | 10003      | NY    |
| 2 | Battery Park         | Park       | Battery PI                 | 40.703217 | -74.015795 | NaN                 | 10004      | NY    |
| 3 | Brooklyn Bridge Park | Park       | Main St                    | 40.702282 | -73.996456 | DUMBO, Brooklyn, NY | 11201      | NY    |
| 4 | Central Park         | Park       | 59th St to 110th St        | 40.784083 | -73.964853 | NaN                 | 10028      | NY    |

## **Restaurant Search**

|   | name                            | categories         | address         | lat       | Ing        | postalCode | state |
|---|---------------------------------|--------------------|-----------------|-----------|------------|------------|-------|
| 0 | Jing Fong Restaurant 金豐大酒樓      | Dim Sum Restaurant | 20 Elizabeth St | 40.715881 | -73.997209 | 10013      | NY    |
| 1 | Golden Unicorn Restaurant 麒麟金閣  | Dim Sum Restaurant | 18 E Broadway   | 40.713629 | -73.997230 | 10002      | NY    |
| 2 | O'Hara's Restaurant & Pub       | Pub                | 120 Cedar St    | 40.709894 | -74.012836 | 10006      | NY    |
| 3 | Mudville Restaurant & Tap House | Wings Joint        | 126 Chambers St | 40.715336 | -74.008881 | 10007      | NY    |
| 4 | Bo Ky Restaurant 波記潮州小食         | Chinese Restaurant | 80 Bayard St    | 40.715696 | -73.998667 | 10013      | NY    |

# **Shopping Store Search**

|   | name  | categories    | address          | lat       | Ing        | postalCode | state |
|---|---|---------------|------------------|-----------|------------|------------|-------|
| 0 | Lux Accessories @ Shop Small Pop-Up Mall      | Jewelry Store | NaN              | 40.712781 | -74.005944 | 10282      | NY    |
| 1 | Westfield World Trade Center                  | Shopping Mall | 185 Greenwich St | 40.711602 | -74.011368 | 10007      | NY    |
| 2 | East Broadway Mall                            | Shopping Mall | 88 E Broadway    | 40.713915 | -73.994290 | 10002      | NY    |
| 3 | South Street Seaport Mall                     | Shopping Mall | 19 Fulton St     | 40.706959 | -74.003798 | 10038      | NY    |
| 4 | Vosges Haut Chocolat @ Shop Small Pop-Up Mall | Gourmet Shop  | NaN              | 40.712937 | -74.013031 | 10282      | NY    |

# Visualisation



