Analysis of the palate of Atlanta Neighborhoods

1. Introduction

Atlanta is the capital, most populous, most ethnically diverse and largest city of the U.S. state of Georgia. With an estimated 2018 population of 498,044, it is also the 37th most populous city in the United States. The city serves as the cultural and economic center of the Atlanta metropolitan area, home to 5.9 million people and the ninth-largest metropolitan area in the nation. As of 2010, Atlanta is the seventh-most visited city in the United States, with over 35 million visitors per year.

2. Business Problem

Food diversity is naturally an important part of such an ethnically diverse city. Restaurant business is hence one of the lucrative business opportunities in Atlanta, the city being home to a large and diverse population and with a heavy tourist foot fall.

The purpose of this project is to analyze the various neighborhoods of Atlanta to assist restaurateurs to decide on the perfect location for by being able to answer the following questions -

- Is this location suitable for the concept and cuisine?
- What is the population base of this area?
- How many customers can be expected (locals & tourists)?
- Is there enough income in this area to support the restaurant?

3. Data Preparation

To perform the analysis, following data sources will be used:

3.1. Wikipedia - Atlanta Neighborhood

- Link: https://en.wikipedia.org/wiki/Table_of_Atlanta_neighborhoods_by_population
- **Description:** The wiki link has been scraped to extract the Atlanta neighborhood vs. population details. Neighborhoods that have population more than 2500 has been selected for the analysis.

| Neighborhood | Population | |
|---------------------------|------------|--|
| Atlanta University Center | 5703 | |
| Bolton | 2996 | |
| Campbellton Road | 4709 | |
| Candler Park | 3291 | |
| Center Hill | 3058 | |

3.2. Foursquare API

- Link: https://developer.foursquare.com/docs/places-api/endpoints/
- **Description:** The Places API offers real-time access to Foursquare's global database of rich venue data and user content. This will be used to make RESTful API calls to retrieve data about venues in different neighborhoods of Atlanta, via the following endpoints:
 - venues (search) This endpoint returns a list of venues near the current location,
 - venues (explore) This endpoint returns a list of recommended venues near the current location

3.3. Retrieve Coordinates of Atlanta neighborhoods: Geopy Client

The coordinates of the Atlanta neighborhoods have been obtained using geocoder class of Geopy client.

| Neighborhood | Population | Lat | Lng |
|---------------------------|------------|-----------|------------|
| Atlanta University Center | 5703 | 33.751543 | -84.413597 |
| Bolton | 2996 | 33.814272 | -84.453263 |
| Campbellton Road | 4709 | 33.692836 | -84.621568 |
| Candler Park | 3291 | 33.766677 | -84.333676 |
| Center Hill | 3058 | 33.774829 | -84.471874 |