

Opening an Indian Restaurant in Atlanta, Georgia

IBM Data Science Capstone Project

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INTRODUCTION

Atlanta is home to the largest Indian population among metropolitan areas. The 10-county Atlanta region is home to approximately 42 percent of Georgia's total population but is home to 77 percent of the state's Asian-Indian population.

For this Capstone Project, I am using the hypothetical scenario for opening an Indian Restaurant in Atlanta, Georgia. As Indian cuisine is quite popular with Americans and Indian alike, it might present a good opportunity for an Indian already living in Atlanta.

Ambience, menu, hygiene and of course taste are all important factors to be kept in mind before getting into the Hospitality Industry, but these are all problems that can be tackled internally by the person(s) in charge. The location of a restaurant is also of utmost importance regardless of the history of a business or the taste of the food.

PROBLEM STATEMENT

The objective is to find a suitable location(s) to open an Indian Restaurant in Atlanta, GA. This project makes use of various Data Science and Machine Learning methodologies (k-means Clustering) to provide a Solution to the client. The project aims to provide a Solution to the Question: 'Where should we consider opening an Indian Restaurant in Atlanta?'

Data

I have used the following Data for the completion of the project:

- List of top suburbs in Atlanta - This gives the coordinates of all the neighborhoods and is used to call the Foursquare API.
- List of Venues in Atlanta- This contains data about all the nearby venues like Restaurants, Bars, Gym etc.
- Demographics of Indians in Atlanta - This is important to understand the distribution of the target audience in Atlanta.

Data Sources

- List of Atlanta suburbs Data from (<https://metroatlantasuburbs.com/communities>)
- Nearby Venues Data created using Foursquare API (<https://api.foursquare.com/v2/venues/>)
- The Demographics Data is scraped from (<http://zipatlas.com/us/ga/city-comparison/percentage-indian-population.htm>)
- Latitude and Longitude values are obtained using the Geocoder package in python.