## **Restaurant Analysis in the City of Austin**

Zack O'Keefe

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## 1. Introduction

Austin is the state capital of Texas and one of the fastest growing cities in the United States. It is a hub for technology, music, film, and an increasingly emerging food scene. The city features several diverse neighborhoods, each offering differing cultural attractions and demographics.

Potential restaurant investors would benefit from knowing which type of restaurants have higher ratings based on the food category and price in each neighborhood to predict the likelihood of it being successful and making it worth their investment. This analysis will explore the top venues in each neighborhood and attempt to find a relationship between restaurant success, measured by the rating, and the type of food it serves and price points in order to steer an investors decision on the best restaurant to fund for a certain area of the city.

## 2. Data

The City of Austin neighborhood data was exported from <u>data.austintexas.gov</u> and represents the boundaries of the City of Austin Neighborhood Planning Areas (NPA) and is public domain. The neighborhood data returned 95 samples. Venue data was gathered from the Foursquare location data by making several API calls.

I used a geolocator to find single point coordinates for each neighborhood instead of having a multipolygon feature class. Once this was completed, I used the coordinates to make the Foursquare API calls for venue information including the name, type of venue, rating, price, etc. After merging this data into a single dataframe, I began my analysis looking for patterns that lead to high rated restaurants in each neighborhood to pass on to interested investors.

- 3. Methodology
- 4. Results
- 5. Discussion
- 6. Conclusion