Analyzing Austin, TX to find the best place to open a restaurant

Applied Data Science Capstone Project

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Introduction

Austin is the capital city of Texas, one of the largest states in the US. It is a widely multicultural city, welcoming whatever kind of weird you may or may not be, making it the hub for many restaurants and diners of various cuisines. Meanwhile, I come from a quieter town like Dallas and moving to a busy city like Austin for college made me realize how much I miss my homemade Indian cuisine. It also came to my knowledge how hard it was to find Indian restaurant places in Austin. Thus the aim of this project is to study the neighborhoods of Austin and formulate the best possible locations for starting an Indian Restaurant in Austin and hopefully bring more to the city that is home to the Texas Longhorns. The evaluations of this project can be useful to potential restaurant business owners and restaurant stakeholders.

Data Collection

I will collect neighborhood data from the Austin City Government and be using Google Geocoding API to find the approximate coordinates of the neighborhoods. Then, use Foursquare API to find the first 100 venues in the neighborhoods within a radius of 1500 meters ~ 0.93 miles. Then I will cluster the neighborhoods using Scikit-learn's K-Means Clustering. I will then compare cluster analysis with demographic data and finally talk about data-driven decision making for a new Indian restaurant business in the city of Austin.