

Predicting the Characteristics of Trending Restaurants

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1. Introduction

Many restaurants fail within the few years of their opening. For example, according to [Business Insider](#), 80% of New York restaurants close within their first five years. However, potential restaurant owners can reduce the likelihood of their failure by using geographic data on successful restaurants in their city. The purpose of this project is to provide potential New York City restaurant entrepreneurs recommendations on where and what type of restaurants they should open by looking at the relationship between trending restaurants, their characteristics, and the characteristics of surrounding top vendors. This information is important for entrepreneurs to decide where and what type of restaurants they should develop in New York City.

2. Data

This project will use data on New York City neighborhoods and the vendors located in these locations. A list of New York neighborhood names from 2014 will be collected from New York University's Spatial Data Repository at https://geo.nyu.edu/catalog/nyu_2451_34572. This dataset involves all 5 New York City boroughs consisting of 306 neighborhoods. A list of neighborhood vendors will be collected from Foursquare. For each neighborhood, the top 100 vendors within a 500 meter radius from each neighborhood center (a total of 30,600 vendors), will be explored.