Detecting parking hotspots in the neighborhood to determine a favorable place to go and use the same data to determine spots to open a restaurant with enough parking.

Introduction/Business Problem:

Its Friday night and we want to hit a restaurant or a bar. By the time we reach there the parking is full because the nearby places are full. To find out about potential hotspots an application that gives an estimate of parking spots. Finally determine where a restaurant is to be opened to ensure essential parking. The use of this data will be crucial in success of a restaurant as it can attract more people with parking spots without the congestion from other restaurants of businesses.

Data:

The data from each of the venues are taken to find out the number of people that are checked in and then the we calculate the parking spots that are available from the venue attributes in the foursquare API. The average number of parking spots in NYC is found in [2]. The parking requirements for each of the neighborhoods are obtained and then the data is used to see if a place is full or not. Using that data we can plot a hotspot of restaurants around a coordinate. Then a map of the NYC is drawn to indicate a heat map of the plots to plan the opening of a restaurant in area where parking is freely available. Top venues are chosen based on popularity and the parking requirement is analyzed.

[1]https://developer.foursquare.com/docs/api-reference/venues/details/

[2]
https://furmancenter.org/files/publications/furman_parking_requirements_policy_brief_3_21_12_final_2.pdf