



# NEIGHBORHOODS IN BANGALORE

HELPING CHOOSE  
BETWEEN SIMILAR  
NEIGHBORHOODS

# ○ Introduction

- With a population of more than 10 million, the city of Bangalore in India is one of the most populous cities in India with a significant migrant population. With the blossoming number of apartments across the city, the choice of apartment to rent is determined not just by the proximity to the workplace but the quality of the neighbourhood. This project will cluster together similar neighborhoods based on the popular venue categories in each neighbourhood and map the various apartments in these neighborhoods.
- This will help people who are looking to move into the city or to see if there are similar neighborhoods to their current neighborhoods which they can consider relocating.



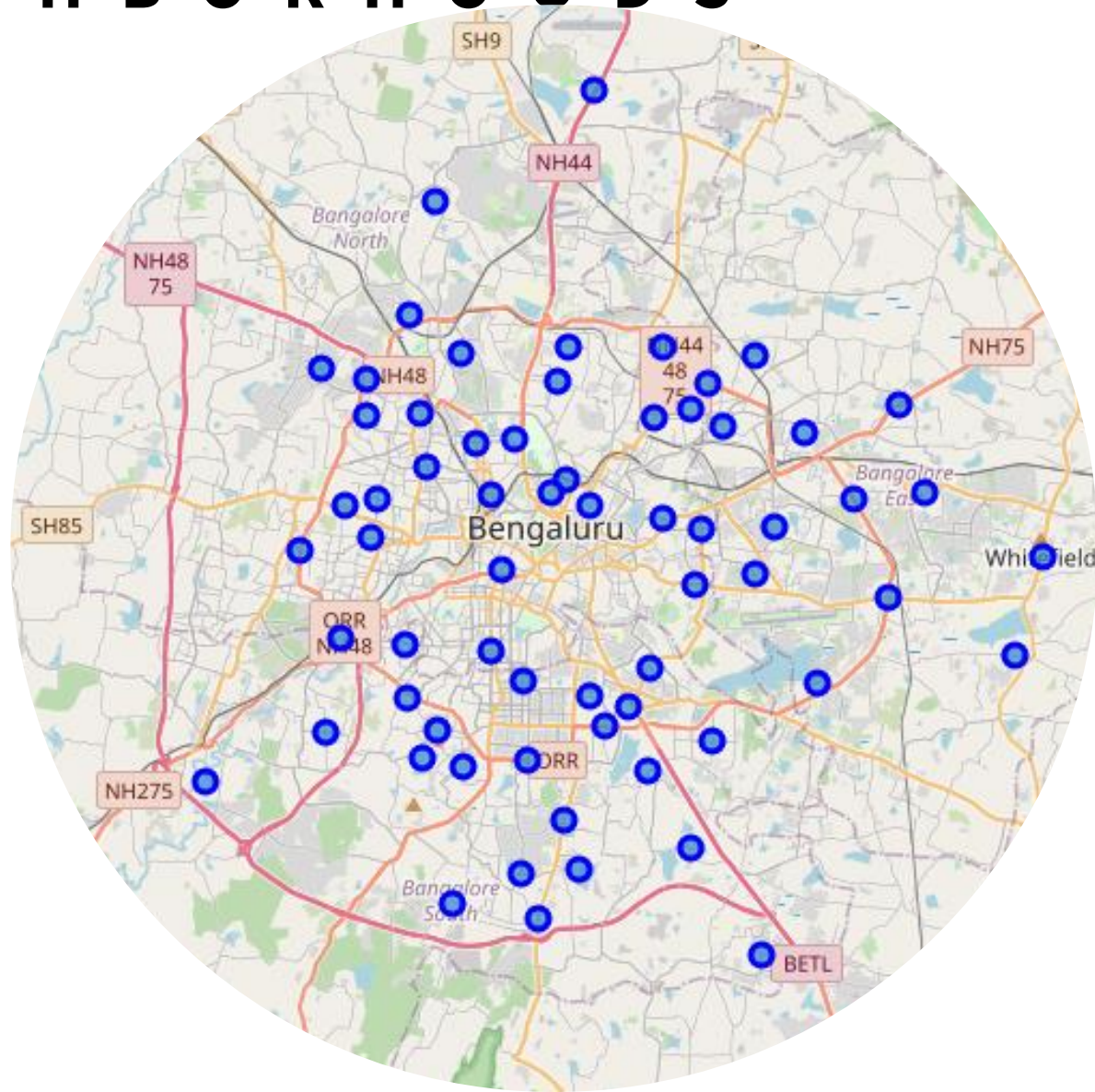
# ○ Data

- List of neighborhoods: wikipedia page on neighborhoods in Bangalore which is available here:  
[https://en.wikipedia.org/wiki/List\\_of\\_neighbourhoods\\_in\\_Bangalore](https://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Bangalore)
- Google Maps API for Latitude and Longitude Details
- Foursquare API to collate neighborhood venue information.





# BANGALORE NEIGHBORHOODS



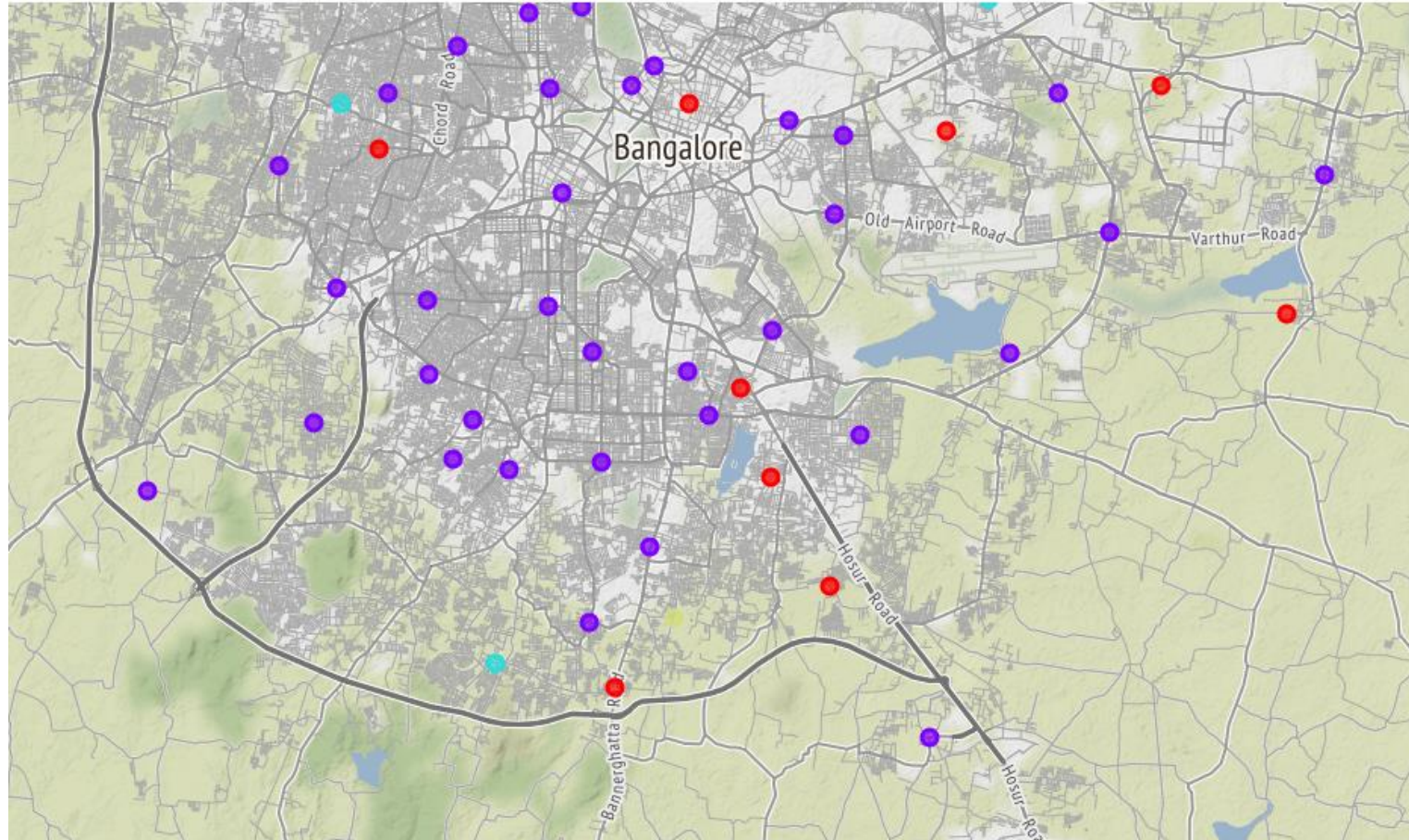
# ○ One-hot vector on most common venues

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Anjanapura	ATM	Women's Store	Electronics Store	Food	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant	Event Space
1	Arekere	Sporting Goods Shop	Indian Restaurant	Pizza Place	Athletics & Sports	Breakfast Spot	Liquor Store	Department Store	Business Service	Fast Food Restaurant	Bar
2	BTM Layout	Indian Restaurant	Ice Cream Shop	Bakery	Chinese Restaurant	Snack Place	Pizza Place	Fast Food Restaurant	Sandwich Place	Coffee Shop	Vegetarian / Vegan Restaurant
3	Banashankari	Clothing Store	Café	Breakfast Spot	North Indian Restaurant	Fast Food Restaurant	Indian Restaurant	Fried Chicken Joint	Pizza Place	Men's Store	Sporting Goods Shop
4	Banaswadi	Indian Restaurant	Vegetarian / Vegan Restaurant	Pharmacy	Kerala Restaurant	Women's Store	Electronics Store	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant
5	Basavanagudi	Indian Restaurant	Fast Food Restaurant	Park	Sandwich Place	Food	Hookah Bar	Pharmacy	Café	Plaza	Metro Station
6	Basaveshwaranagar	Ice Cream Shop	Fast Food Restaurant	Indian Restaurant	Juice Bar	Burger Joint	Miscellaneous Shop	Gastropub	Sporting Goods Shop	Pizza Place	Gym
7	Begur	Supermarket	Mobile Phone Shop	Women's Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant	Event Space	Electronics Store
8	Bellandur	Hotel Bar	Soccer Field	Fast Food Restaurant	Shopping Mall	Indian Restaurant	Hookah Bar	Eastern European Restaurant	Hotel	Farmers Market	Falafel Restaurant
9	Bidadi	Indian Restaurant	Breakfast Spot	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant	Event Space
10	Bommanahalli	Indian Restaurant	Department Store	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant	Event Space





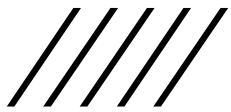
# ○ Clusters with k-means algorithm



# Results

	Neighborhood	long	lat	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue
7	Shivajinagar	77.605693	12.985650	0	Indian Restaurant	Clothing Store	Donut Shop	Fast Food Restaurant	Tea Room	Market	South Indian Restaurant	Event Space	Flower Shop
11	CV Raman Nagar	77.664184	12.979325	0	Indian Restaurant	Coffee Shop	Food Court	Café	Department Store	Dessert Shop	Dim Sum Restaurant	Diner	Donut Shop
12	Hoodi	77.712657	12.989555	0	Indian Restaurant	Bus Station	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant
13	Krishnarajapuram	77.704433	13.016999	0	Indian Restaurant	Bakery	Tibetan Restaurant	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market
18	Banaswadi	77.648194	13.010376	0	Indian Restaurant	Vegetarian / Vegan Restaurant	Pharmacy	Kerala Restaurant	Women's Store	Electronics Store	Flea Market	Fast Food Restaurant	Farmers Market
27	Mathikere	77.563976	13.033419	0	Indian Restaurant	Fast Food Restaurant	Ice Cream Shop	Department Store	Pizza Place	Bus Station	Convenience Store	Halal Restaurant	Historic Site
32	Bommanahalli	77.624194	12.902980	0	Indian Restaurant	Department Store	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant
33	Bommasandra	77.697437	12.816730	0	Indian Restaurant	Women's Store	Electronics Store	Flower Shop	Flea Market	Fast Food Restaurant	Farmers Market	Falafel Restaurant	Event Space

	Neighborhood	long	lat	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue
0	Cantonment area	77.597800	12.993800	1	Indian Restaurant	Bakery	Music Venue	Gym / Fitness Center	Concert Hall	Tea Room	Pub
1	Domlur	77.638732	12.960986	1	Indian Restaurant	Café	BBQ Joint	Rajasthani Restaurant	Chinese Restaurant	Asian Restaurant	Sandwich Place
2	Indiranagar	77.640836	12.978369	1	Indian Restaurant	Café	Pub	Bakery	Vegetarian / Vegan Restaurant	Fast Food Restaurant	Chinese Restaurant
3	Malleswaram	77.569236	13.005511	1	Ice Cream Shop	Coffee Shop	Chinese Restaurant	Fast Food Restaurant	South Indian Restaurant	Donut Shop	Café
4	Pete area	77.577000	12.965600	1	Indian Restaurant	Plaza	Market	Flower Shop	Historic Site	Food Truck	Diner



# ○ Discussion

- Looking at the clustered data, the most common venue across the first and second cluster is Indian restaurants. Therefore, while this may not be helpful in distinguishing between the first and the second neighborhood, if you are looking to stay in a neighborhood with enough number of eating out places, then neighborhoods in the third cluster may not be your ideal choice.
- Between the first cluster and the second cluster, if you are looking a place with more number of neighborhood cafes, pubs and fitness centres, any of the neighborhoods in the second cluster will be your ideal choice.

