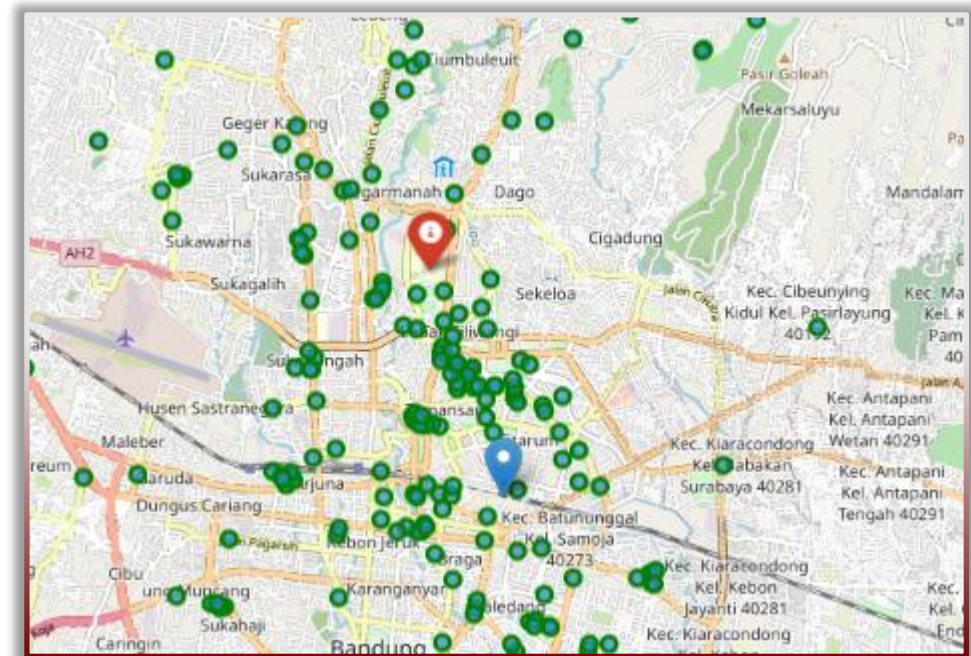# Best Neighborhood for Budi in Bandung

[I Wayan Nadiantara – Bandung, Indonesia]

Help Budi to Find the best Neighborhood to live while studying at Bandung Institute of Technology (ITB)
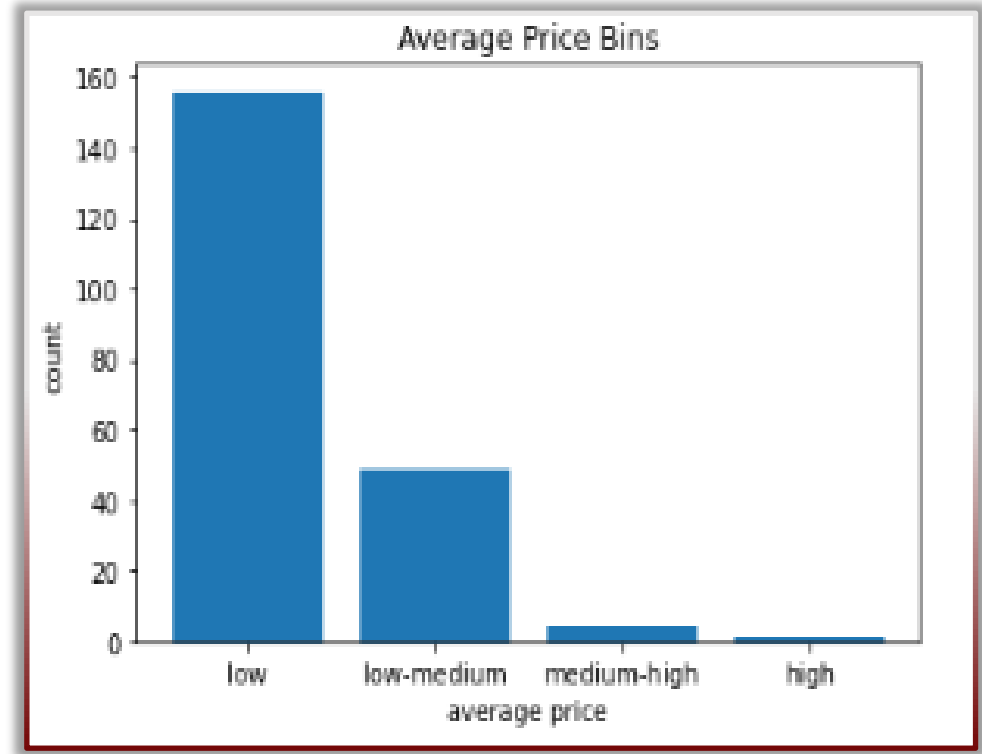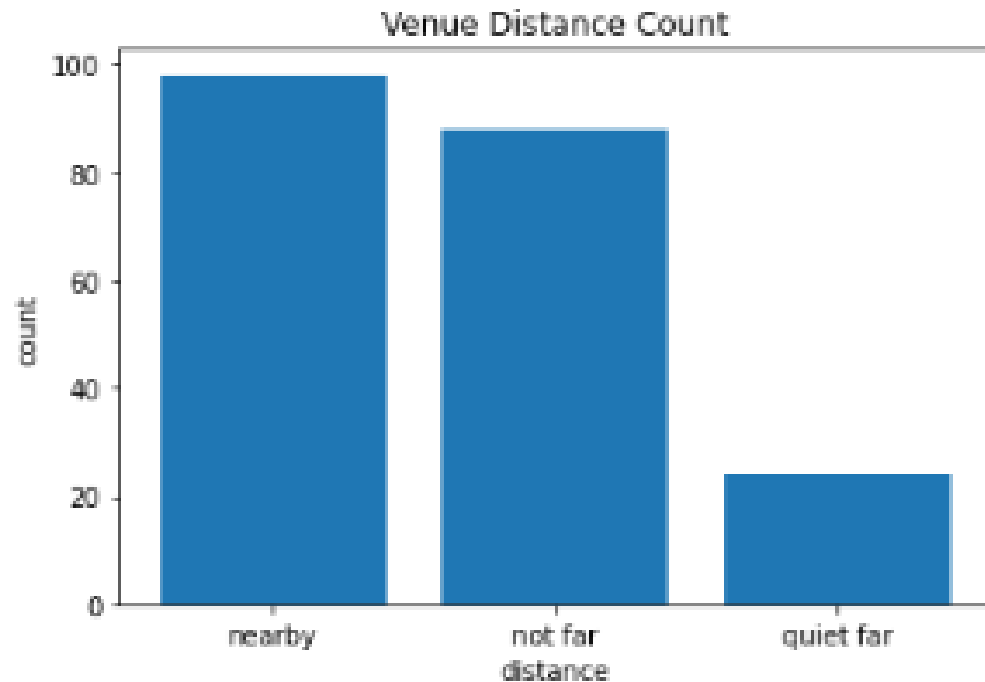
Which neighborhood is:

o Near the campus ?

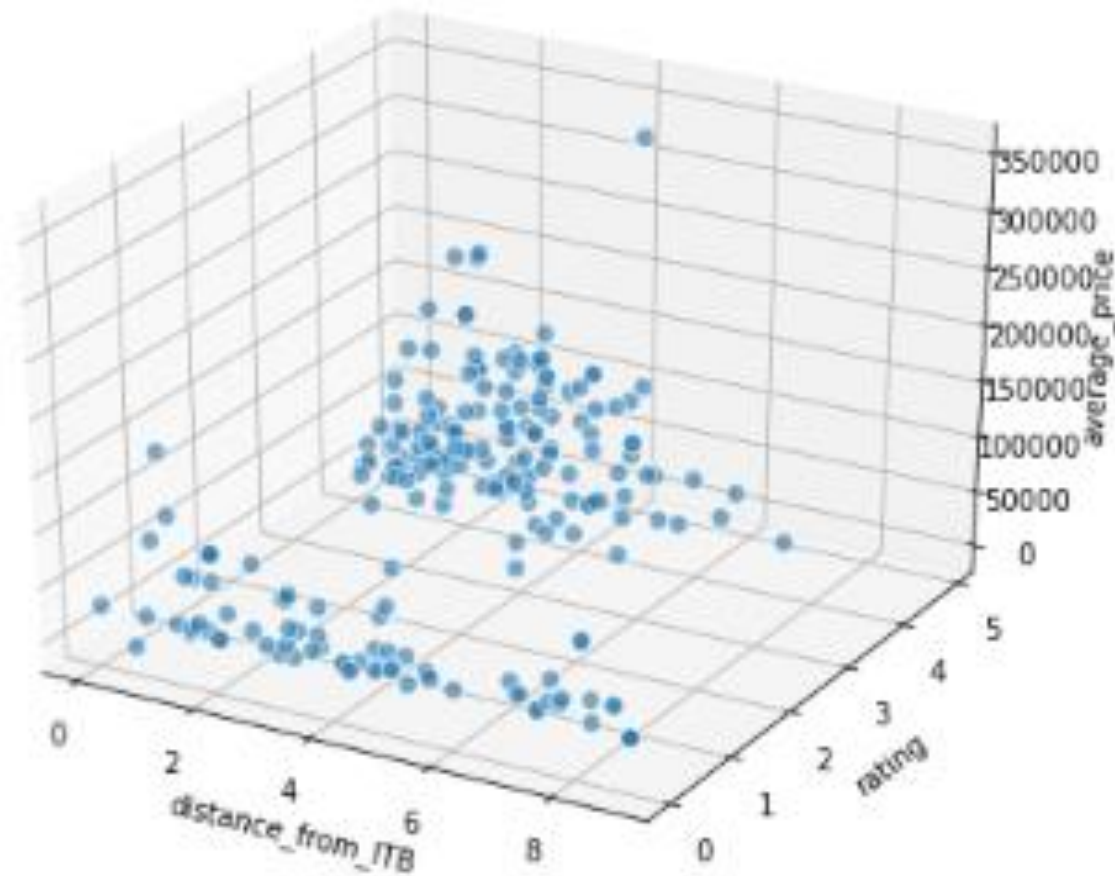o Also not expensive?

o Also popular?

Data acquisition and cleaning

- Venues from Zomato API (https://developers.zomato.com/api) consist of: Name, address, rating, price range, price for two, latitude,and longitude.

- Venues from Foursquare API (https://developers.zomato.com/api) consist of: Name, category, latitude, and longitude.

- Add distance parameter from the campus using "geopy.distance" module

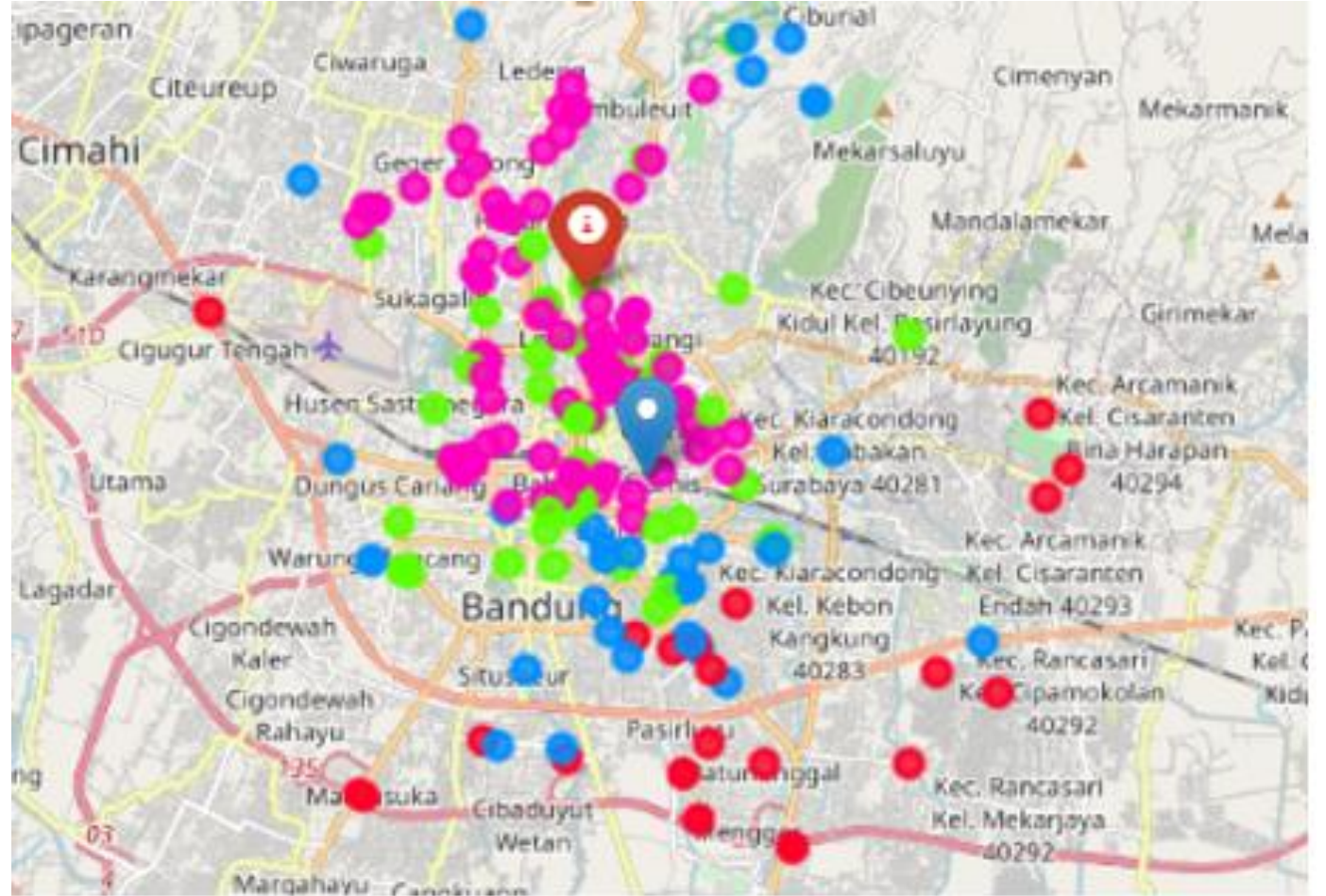# Distribution of venues based on distance and average price

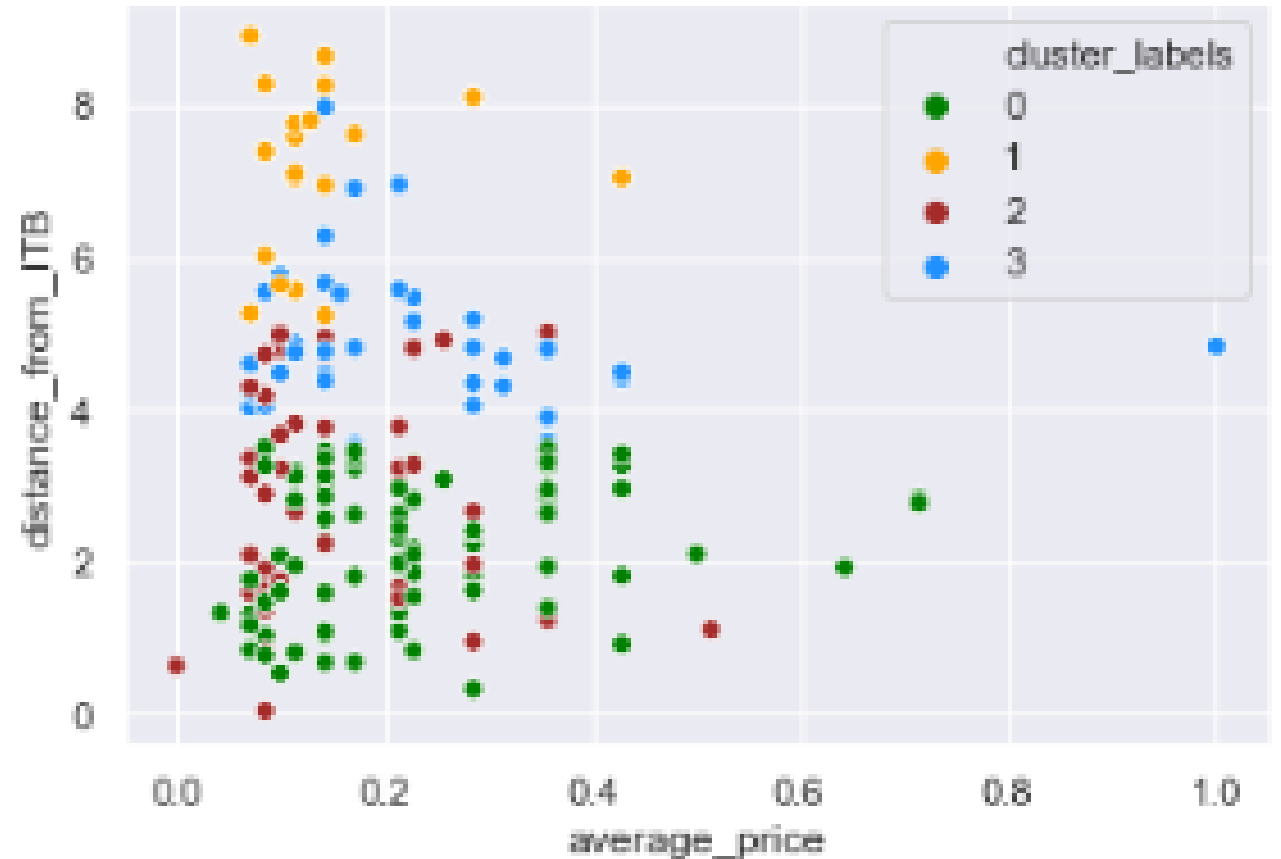# 3 Dimensional Scatter Plot

K-Means Clustering(K= 4)

- Pink = Cluster 0
- Red = Cluster 1
- Green = Cluster 2
- Blue = Cluster 3

With K-Means Algorithm

Best cluster is cluster 0, the most popular cluster with average normalized price = 0.2198 and average distance = 2.1739 km

Conclusion and Future Directions

- Budi should get a neighborhood around cluster 0
- Average normalized price is higher nearby the campus and city centre.
- Future development should consider a metric that measure correlation between the cost a room and distance to the campus.