The Battle of Neighborhoods - Singapore

Singapore

- Singapore is a multicultural and vibrant city state that is suitable for work, live and play.
- Yet, land constraint is a problem.
- Understanding the amenities offered in each district in Singapore is important for people looking to live in Singapore.

Data acquisition and cleaning

Data sources

- Location details are scraped from:
 https://en.wikipedia.org/wiki/Postal codes in Singapore
- An excel file with approximate coordinates representing each district was generated.
- Additional information regarding the common amenities near those general locations may be access through FourSquare API.

Data cleaning

Duplicates and zeros data were removed.

Features and modeling

Features

 Common venues in district, accessed from Foursquare API.

Modeling

- K-means clustering algorithm
- Suitable to train the unlabelled data.

Cluster examination

- Most districts fall under cluster 0 which has food places as their most common venues.
- Cluster 1 has zoo as one of its most common venues.
- Cluster 2 has food places and zoo as its common venues.
- Cluster 3 has zoo and farm as its most common venues.
- Cluster 4 is near to the airport.

Conclusions

- In all, Singapore appears to be truly a food haven, based on this arbitrary analysis.
- Most districts have food places as common amenities, making cluster 0 an obvious choice for many.
- Those who enjoy wildlife may prefer to stay in cluster 1 and 3.
- Those who travel via flight often may prefer cluster 4.