

IBM Capstone Project

Identify Good Locations To Open A New Flower Shop

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Background

- ◆ Using Foursquare data via its API (<https://developer.foursquare.com/docs/api>) to identify good location for opening a flower shop in Sydney.

Problem

- ◆ A florist may:
 - have experience to operate a shop
 - know the business well
 - know the suppliers
- ◆ BUT
 - Not knowing where to start

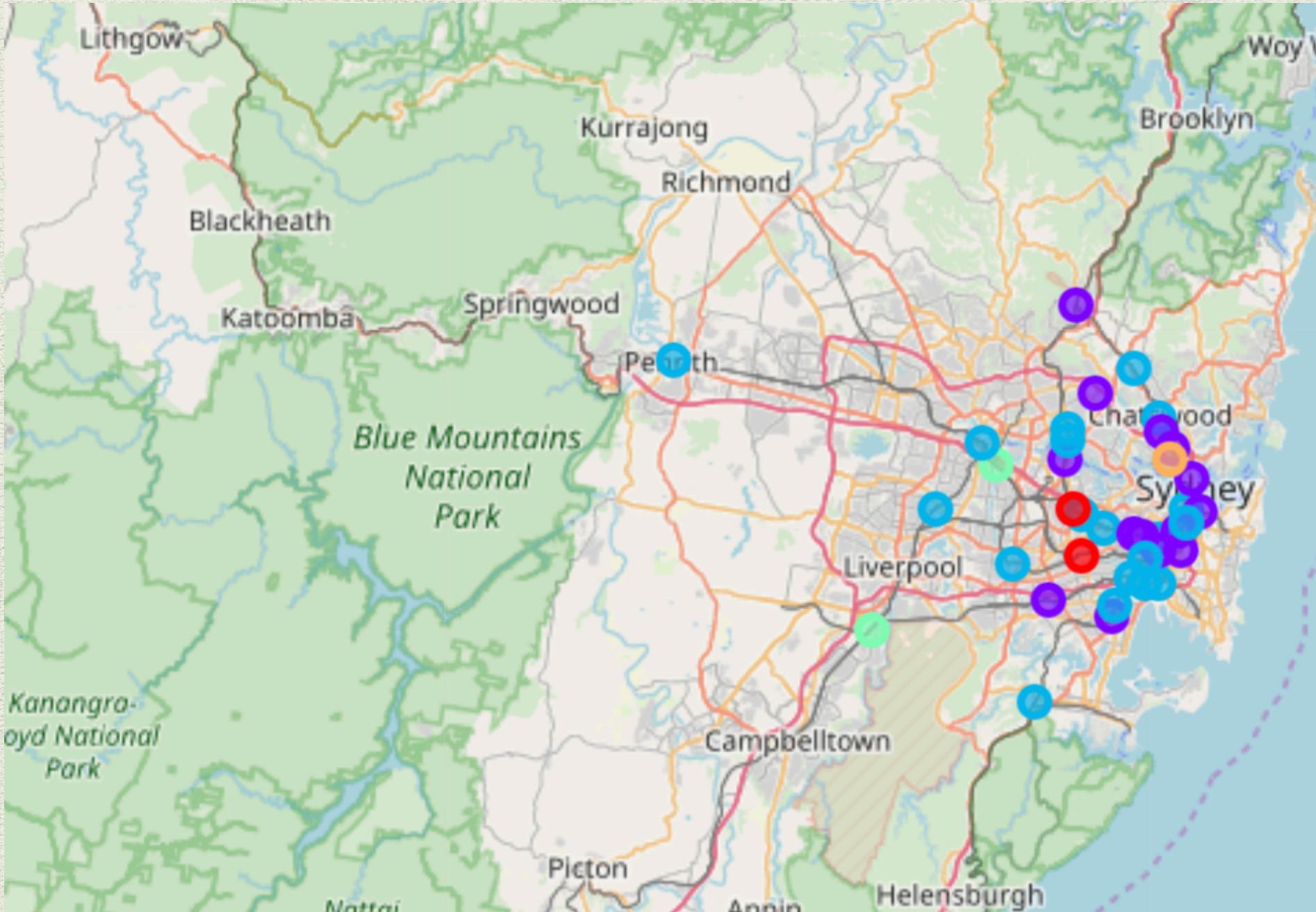
Data

- ◆ Train station geographic data
- ◆ Flower shop locations
- ◆ Venue information of surrounding area of train stations

Solving the Problem

- ◆ 1. Collect surrounding type of venues of each station.
- ◆ 2. Using k -mean clustering to classified train stations into clusters.
- ◆ 3. Calculate the average concentration of flower shops in each cluster.
- ◆ 4. Find out the *best* cluster and identify stations within the cluster which do not have a flower shop

Clustering Stations

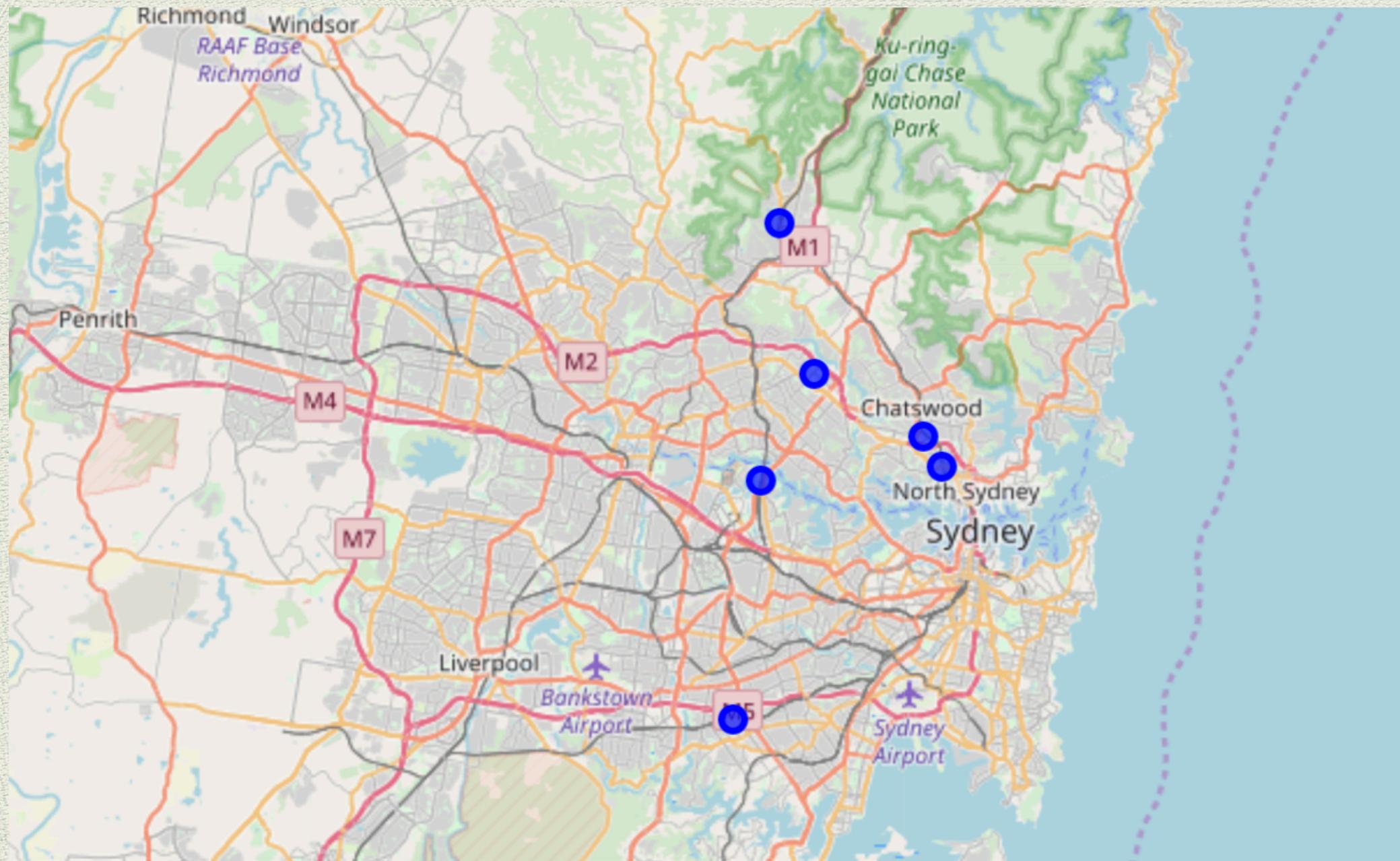


Stations are classified into different clusters (one colour per cluster)

Result

- ◆ we have identified 6 stations with similar surrounding area suitable for opening a flower shop nearby:
- ◆ Rhodes Stations
- ◆ Artarmon Stations
- ◆ St Leonards Stations
- ◆ Narwee Station
- ◆ Hornsby Station

Result



Locations of stations suitable for opening a flower shop nearby

Conclusion

- ◆ Using Foursquare data, we have identified 6 stations with similar surrounding area suitable for opening a flower shop nearby.