



Where to open a new Korean Restaurant in Melbourne

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Researching where to open a new Korean restaurant in Melbourne

- ❑ Melbourne is one the most culturally diverse cities in the world.
- ❑ The level of the competition between restaurants is also one of the world's highest.
- ❑ Focus on Korean cuisine which is one of my favorite cuisines.
- ❑ It is crucial where to open a new restaurant because of high competitions.
- ❑ Find a suburb where a lot of Korean people live, but not many Korean restaurants.

Data source

1. 2016 Australia Census

- Has key characteristic data on every person in Australia
- Age, gender, income, ancestry, education, language spoken, family composition, employment, mortgage repayment and so on.
- Publicly available at <https://datapacks.censusdata.abs.gov.au/datapacks/>

2. Foursquare

- One of the best location data platforms
- Foursquare API is available for developers. (<https://foursquare.com/>)

Data wrangling

- ❑ The necessary data was spread over many files for the census data.
 - Four files were read separately and then merged.
- ❑ Latitude/Longitude information is not in the census data.
 - The library called “Nominatim” was used to get latitude and longitude by suburb names.
- ❑ Nearby Korean restaurants
 - Foursquare API was used to find Korean restaurants in a suburb. The latitude and longitude obtained above was passed to Foursquare API.

Data visualization

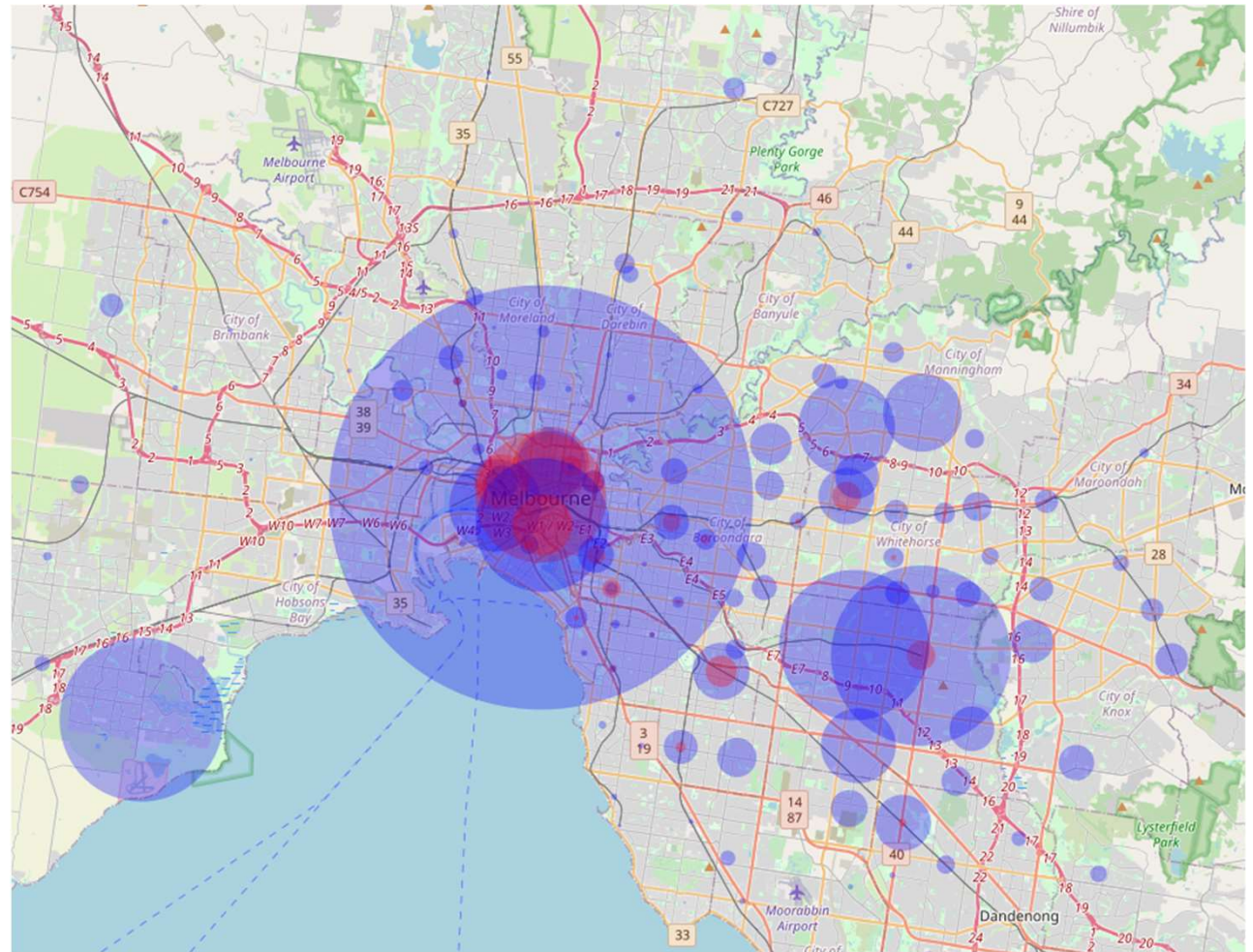
- Map 1

[Map]

- Korean ancestry population (Blue)
- The number of Korean Restaurant (Red)

[Observations]

- Many Korean people live in the city. Some areas in west and east have moderate number of Korean people
- Korean restaurants are concentrated in the city area.



Data visualization

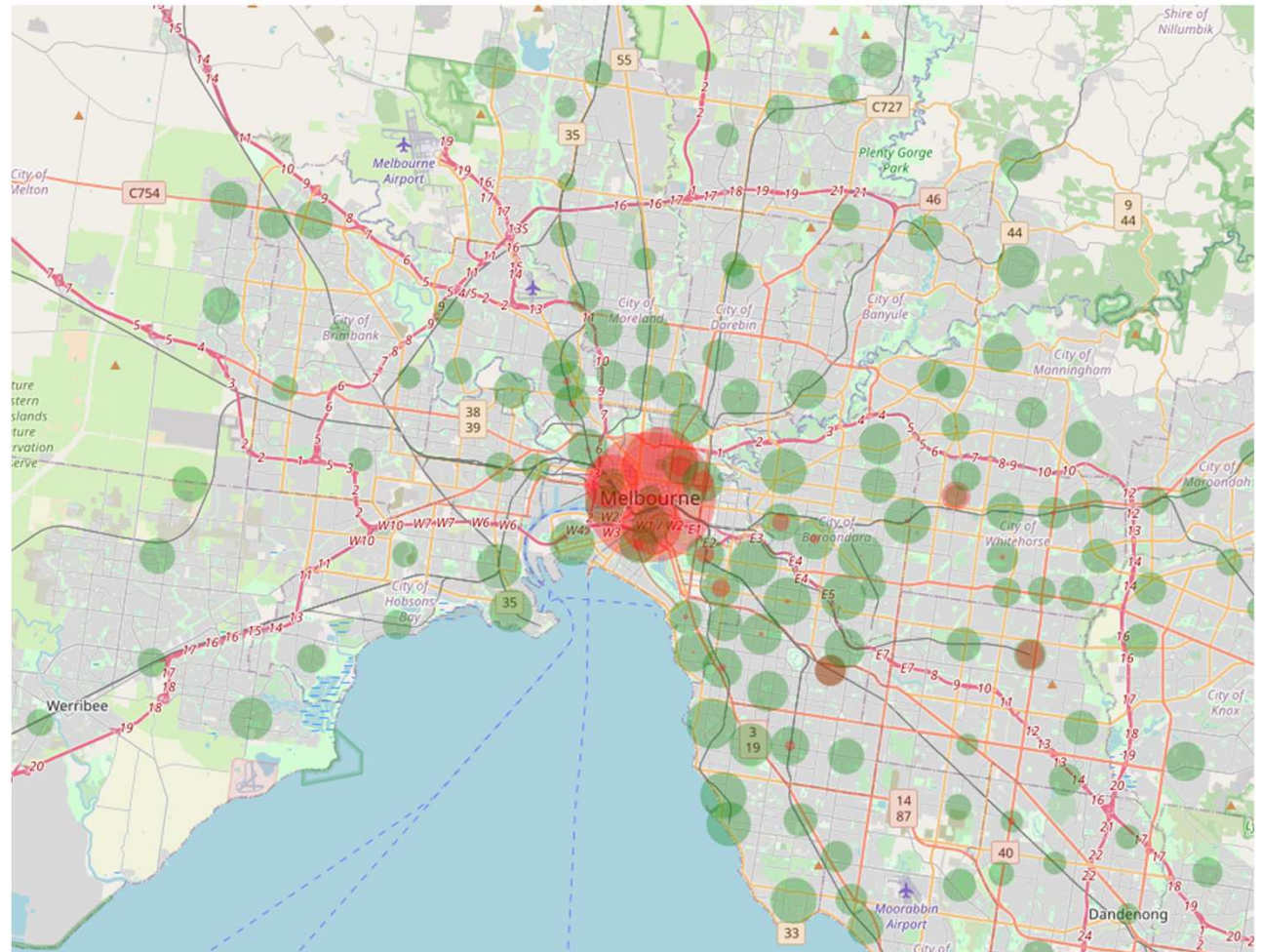
- Map 2

[Map]

- Median household income (Green)
- The number of Korean Restaurant (Red)

[Observations]

- People with high income live in south and south east close to the city.
- The suburbs where Korean people live (see the previous slide) are not particularly rich suburbs, but also not poor suburbs.

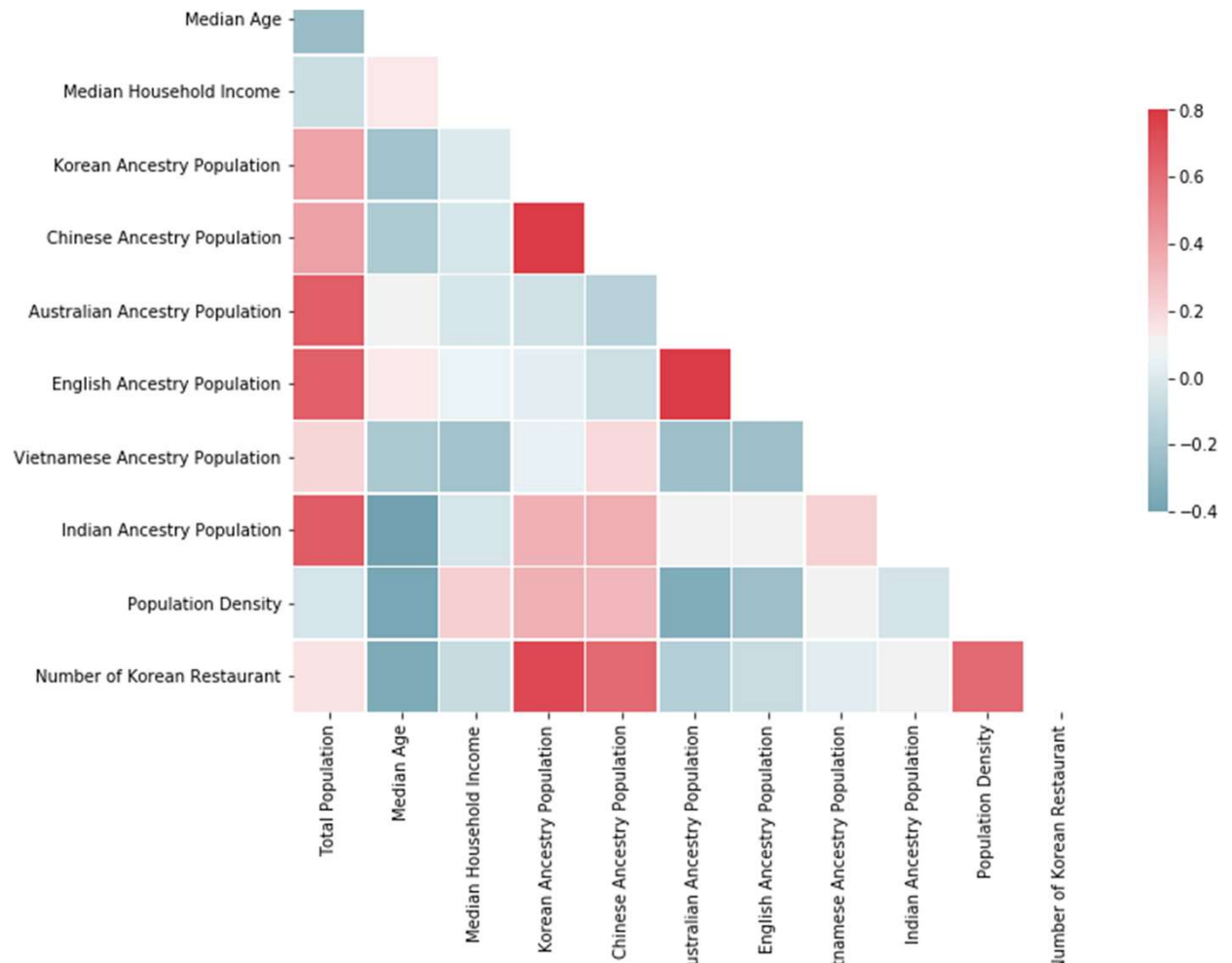


Data visualization

- Heatmap

Correlation heatmap was created to see correlations between data.

- Korean ancestry population and the number of Korean restaurants have a strong correlation.
- Chinese ancestry population and the number of Korean restaurants have a strong correlation too. Chinese people might like Korean food too. In fact, Korean TV drama is very popular in China.
- Median age and the number of Korean restaurants have a moderate negative correlation. It hints younger generation prefer Korean food more.

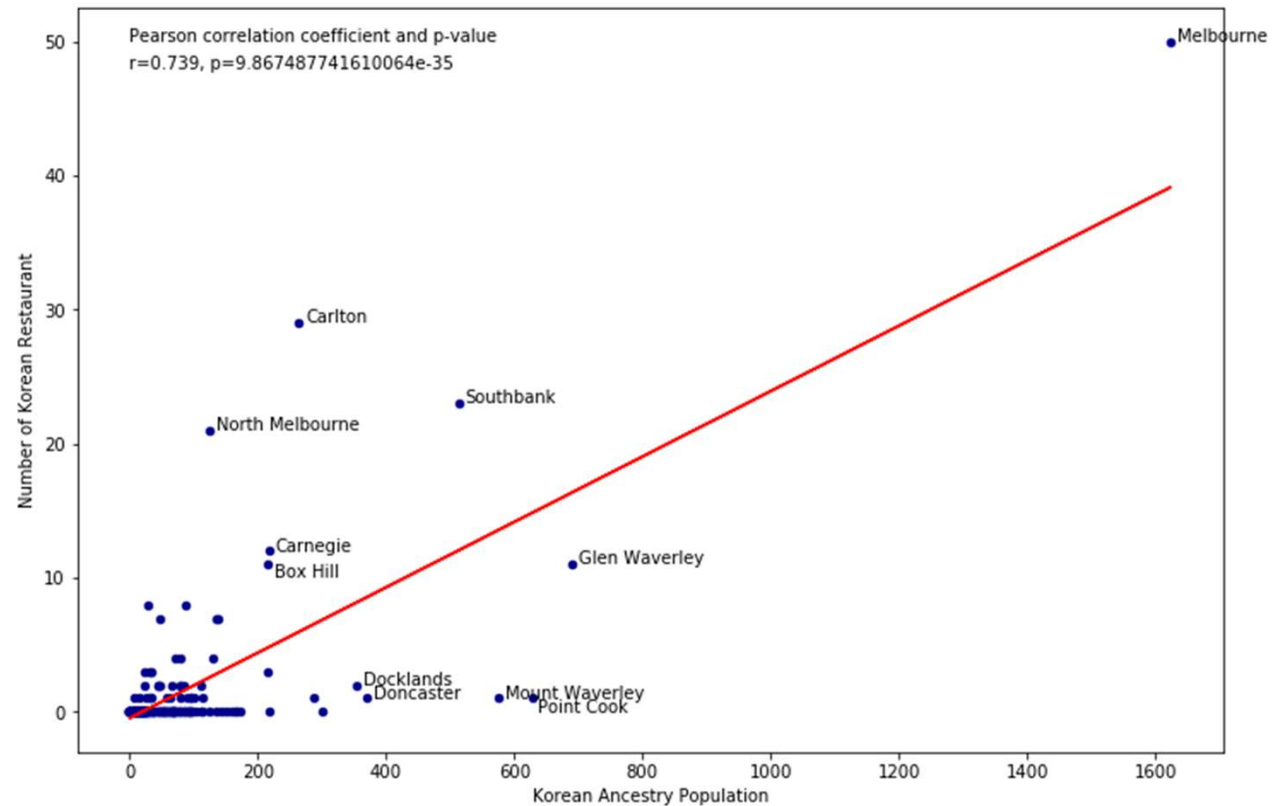


Results

- Scatter plot with regression line

The suburbs below the red line indicate a good place to open a Korean restaurant.

- ✓ Point Cook
- ✓ Mount Waverley
- ✓ Glen Waverley
- ✓ Docklands
- ✓ Doncaster



Conclusion and Future Improvements

Identified good suburbs to open a new Korean restaurant in Melbourne.

There is a room to improve the analysis.

- ❑ Consider categories of Korean restaurants such as Korean traditional cuisine, Korean fried chicken and Korean barbecue.
- ❑ Improve the searching method to consider the size of suburbs, and perform multiple searches in one suburb. (Foursquare API returns up to 50 results.)
- ❑ Use the latest census data which will be conducted in 2021.