

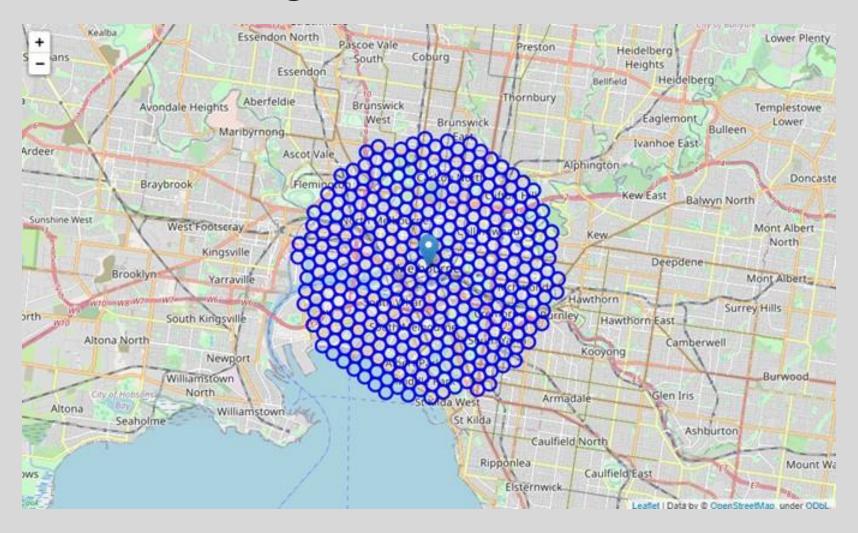
Predicting a Viable Location for a Restaurant

- With existing established restaurants, it is important to identify the right location to setup a new restaurant
- With a significant number of restaurants being in the CBD and surrounding suburbs:
 - Need to identify locations that are not crowded with established restaurants
 - Need locations that do not have any current Italian restaurants
- Consider other factors like attractiveness of each location, levels of noise, real estate availability, prices, social and economic dynamics of every neighbourhood etc.

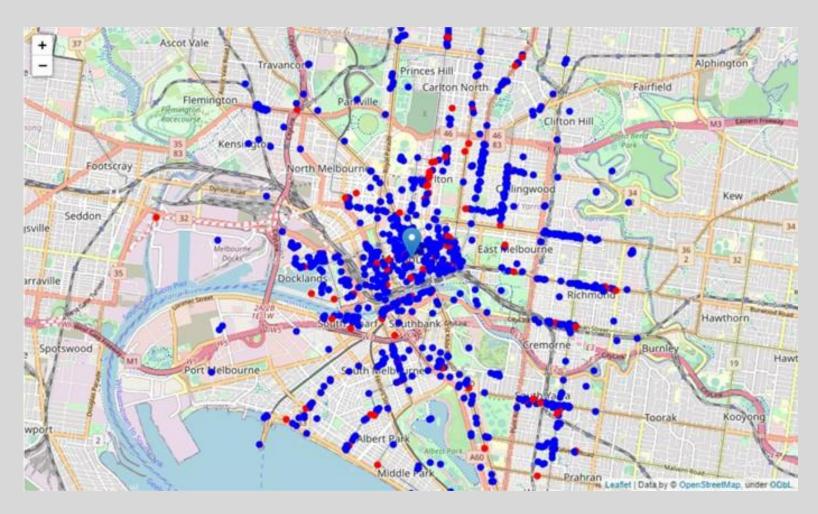
Data and How Used

- Foursquare API was used to identify the number of restaurants and their type and location in every neighbourhood.
- Nominatim geocoding was used to get the coordinates for Melbourne and the identified neighbourhood centres.
- Nominatim reverse geocoding was used to generate approximate addresses of neighbourhood centres.
- Accessed a json file from VIC Suburb/Locality
 Boundaries (https://data.gov.au/dataset/ds-dga-af33dd8c-0534-4e18-9245-fc64440f742e/details?q=) was used to draw the borders of City of Melbourne boroughs on the map.

Grid of Cells Covering Area of Interest ~12x12 kilometres



Identify Restaurants within the Area of Interest

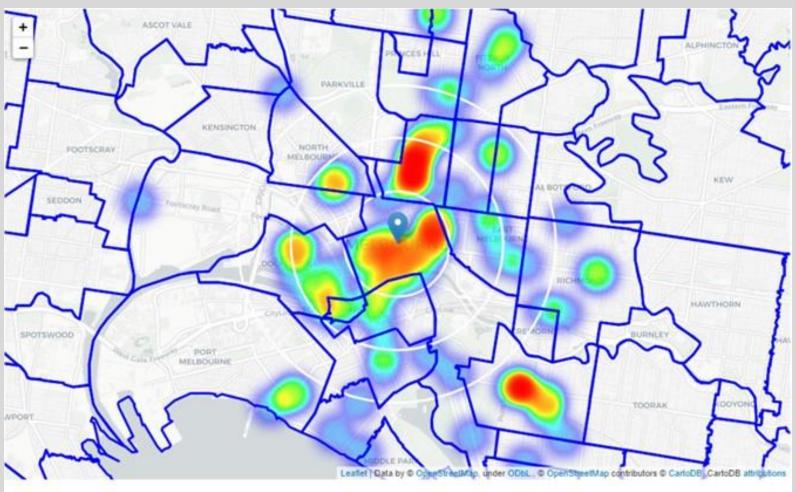


- Total number of restaurants: 1,085
- Total number of Italian restaurants: 116
- Percentage of Italian restaurants: 10.69%
- Avg number of restaurants
 in each area: 3.92

All Restaurant Density Heat Map Area of Interest



Italian Restaurant Density Heat Map Area of Interest

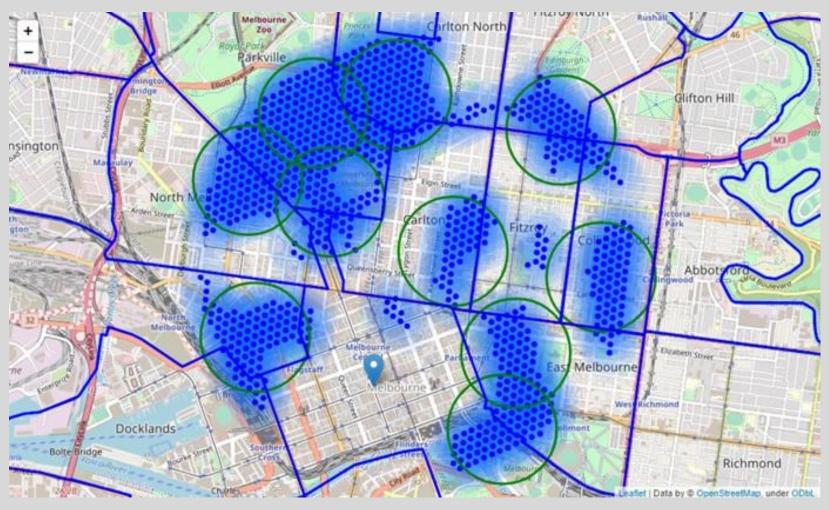


 Low Italian restaurant density positioned north-west, north-east and south-east from the city centre

Potential Restaurant Locations

- To identify potential restaurant locations, there is a requirement to identify those areas that meet the following criteria:
 - Locations with no more than two restaurants in radius of 250 metres.
 - No Italian restaurants in a radius of 400 metres.
- The results from applying these criteria, are as follows:
 - Locations with no more than two restaurants nearby: 1,239.
 - Locations with no Italian restaurants within 400m: 1,145.
 - Locations with both conditions met: 866.

Centres of Zones Containing Good Locations



 Clusters represent groupings of most of the candidate locations and cluster centres are placed nicely in the middle of the zones 'rich' with location candidates.

Addresses of Areas Recommended for Further Analysis

Addresses of centres of areas recommended for further analysis

Lansdowne Street, East Melbourne, Melbourne, City of Melbourne, Victoria, 3002, Australia	=>	1.7km from Melbourne
East West Link (Stage 1), Clifton Hill, Fitzroy, Melbourne, City of Yarra, Victoria, 3065, Australia	=>	3.2km from Melbourne
Flagstaff City Inn, 45, Dudley Street, West Melbourne, North Melbourne, Melbourne, City of Melbourne, Victoria, 3003, Australia	=>	1.5km from Melbourne
33 Cliveden Close, East Melbourne, Melbourne, City of Melbourne, Victoria, 3000, Australia	=>	1.6km from Melbourne
Center Avenue, Carlton North, Princes Hill, Melbourne, City of Melbourne, Victoria, 3054, Australia	=>	3.4km from Melbourne
MB Armistice, 163-165R, Alexandra Parade, Fitzroy North, Melbourne, City of Yarra, Victoria, 3068, Australia	=>	3.7km from Melbourne
Mercure North Melbourne, Harker Street, Hotham Hill, North Melbourne, Melbourne, City of Melbourne, Victoria, 3051, Australia	=>	2.8km from Melbourne
Melbourne Museum, 11, Nicholson Street, Melbourne Innovation District, Carlton, Fitzroy, Melbourne, City of Melbourne, Victoria, 3053, Australia	=>	1.8km from Melbourne
National Storage, 110, Wellington Street, Collingwood, Melbourne, City of Yarra, Victoria, 3066, Australia	=>	2.9km from Melbourne
University of Melbourne, Grattan Street, Melbourne Innovation District, Parkville, Carlton, Melbourne, City of Melbourne, Victoria, 3010, Australia	=>	2.2km from Melbourne

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the candidate
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Locations Representing Centres of Zones



Locations of 10

 addresses representing centres of zones
 containing locations
 with low number of restaurants and no
 Italian restaurants
 nearby.

Conclusion and Future Directions

- Identified general boroughs that justify further analysis (Docklands and East Melbourne)
- Major zones of interest (containing the greatest number of potential locations) and addresses of those zone centres were created
- Final decision on optimal restaurant location will be made by stakeholders based on specific characteristics of neighbourhoods and locations in every recommended zone considering:
 - Attractiveness of each location (proximity to park or water)
 - Levels of noise / proximity to major roads
 - Real estate availability
 - Prices
 - Social and economic dynamics of every neighbourhood