

# Sydney or Melbourne

## Choose a city from a business perspective

Ashley

July 24,2021

### 1. Introduction

#### 1.1 Background

I am choosing which city should I go to study in, Sydney or Melbourne. Both cities are great, they are all in downtown, so I decide to choose one from a business perspective.

#### 1.2 Problem

It's hard to choose which cities to study in, so I decided to choose schools from an objective data perspective.

### 2. Data acquisition and cleaning

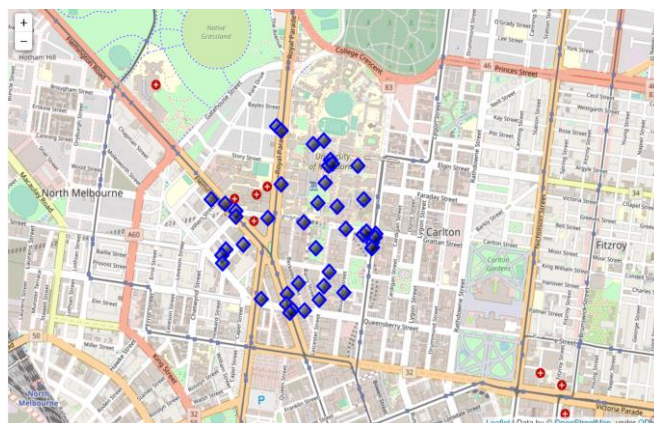
Data on Sydney and Melbourne City neighborhoods, boroughs, including boundaries, latitude, longitude, restaurants, and restaurant ratings and tips are necessary to answer the above questions.

Based on definition of our problem, factors that will help are data on the neighborhoods, boroughs, those neighborhoods' latitude and longitude coordinates, and venue data, notably data about restaurants.

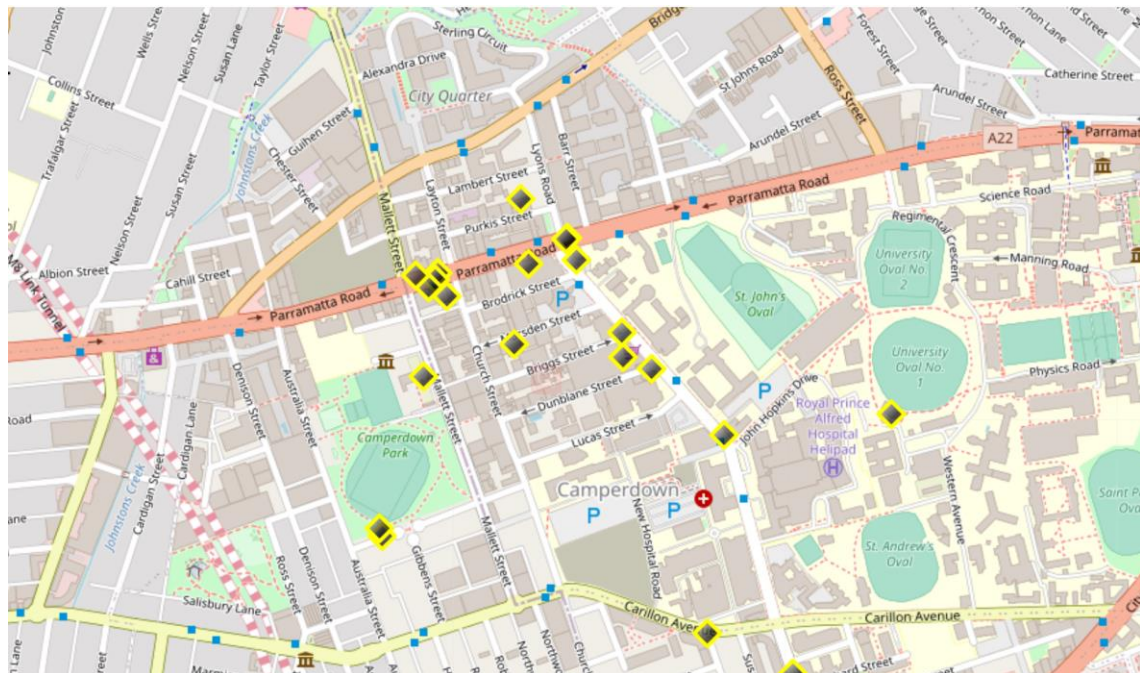
information about the locations and venues will be obtained using the FourSquare API and the Python Request library. The data will be cleaned, processed and sorted based on their rankings. Finally, using graphing from Python packages, the data will be visually examined.

### 3. Exploratory Data Analysis

#### 3.1The location




The venue of the University of Melbourne is very close, and the distance between them is not very far



The venue of the University of Sydney is decentralized, it's not very convenient.

### 3.2 The categories

	name	categories	lat	lng
0	Carte Crêpes	Café	-37.799052	144.960357
1	Seven Seeds	Café	-37.802870	144.959120
2	Lanna Thai	Thai Restaurant	-37.799097	144.954388
3	House of Cards	Coffee Shop	-37.799243	144.961597
4	University House	Lounge	-37.796282	144.960054
5	 Egg Sake Bistro	Japanese Restaurant	-37.797019	144.961163
6	Arabesque	Persian Restaurant	-37.803363	144.958384
7	Bobbie Peels	Bar	-37.803849	144.958320
8	Arts House Meat Market	Indie Theater	-37.801289	144.954410
9	Dr Dax Kitchen	Coffee Shop	-37.798186	144.957974

*The University of Melbourne*

The university of Melbourne has more variety categories.

	name	categories	lat	lng
0	IRO Café	Café	-33.887800	151.180170
1	Gather On The Green	Café	-33.890266	151.176188
2	Acre Farm and Eatery	Restaurant	-33.888066	151.176885
3	Campos Coffee	Coffee Shop	-33.893007	151.183213
4	Konya Kebab	Burger Joint	-33.886960	151.177260
5	Alfred Hotel	Pub	-33.887966	151.180656
6	Camperdown Cellars	Liquor Store	-33.886644	151.177121
7	Papaya Thai	Thai Restaurant	-33.887466	151.180159
8	Deus Ex Machina	Motorcycle Shop	-33.886167	151.179266
9	Boss Lady Food & Co.	Café	-33.885624	151.178480

*The University of Sydney*

## 4. Conclusions

After this study, I will choose Melbourne. There are two reasons. First, the number of venues Melbourne has more venues than Sydney. 43 venues were returned by Foursquare in Melbourne. And 25 venues were returned by Foursquare in Sydney. Second, the distance between two venues As we can see from the map, Melbourne's venues are more concentrated than Sydney's.