

Capstone Project – Applied Data Science | Coursera

Introduction/Business Problem

Problem Description

A friend will be moving to a different city Bangalore, India from her home city of New Delhi, India for a job change.

She wants to find a neighborhood to stay in the new city which is the most like her home neighborhood.

Problem Background

I think this is an interesting problem to solve using Data Science as many people move between cities for various reasons such as job change, studies etc.

Doing this kind of analysis will give them a more familiar/similar environment in which they can adjust to their new home more easily.

Target Audience

- People moving to a new city
- Property rental websites
- Real estate agents

Data

Foursquare API

<https://developer.foursquare.com/places>

```
{'type': 'Feature',  
  'id': 'nyu_2451_34572.1',  
  'geometry': {'type': 'Point',  
    'coordinates': [-73.84720052054902, 40.89470517661]},  
  'geometry_name': 'geom',  
  'properties': {'name': 'Wakefield',  
    'stacked': 1,  
    'annoline1': 'Wakefield',  
    'annoline2': None,  
    'annoline3': None,  
    'annoangle': 0.0,  
    'borough': 'Bronx',  
    'bbox': [-73.84720052054902,  
      40.89470517661,  
      -73.84720052054902,  
      40.89470517661]}}
```

Geocoder

<https://geocoder.readthedocs.io/>

```
address = 'Toronto, CA'  
  
geolocator = Nominatim(user_agent="ny_explorer")  
location = geolocator.geocode(address)  
latitude = location.latitude  
longitude = location.longitude  
print('The geograpical coordinate of {} are {}, {}'.format(address, latitude, longitude))
```

The geograpical coordinate of Toronto, CA are 43.653963, -79.387207.