# Capstone Project: The Battle of Neighborhoods

# MOVING TO ATLANTA, GEORGIA. ANALYSIS OF THE JOURNEY.

## Data Description:

The following data was considered in the analysis:

### 1.- Cities and Counties Data:

I found the list of Cities and Counties from Wikipedia : https://en.wikipedia.org/wiki/List_of_municipalities_in_Georgia_(U.S._state) .I scrapped the data from the wiki, then cleaned and reduced to be applied creating choropleth map .

```
.0]:  ▶  df1.head()
```

```
ıt[10]:
```

|   | City | County | Population | Land |
|---|------|--------|-----------|------|
| 0 | Baxley | Appling | 4400 | 8.38 |
| 1 | Graham | Appling | 291 | 1.74 |
| 2 | Surrency | Appling | 201 | 0.77 |
| 3 | Pearson | Atkinson | 2117 | 3.35 |
| 4 | Willacoochee | Atkinson | 1391 | 3.82 |

### 2.- Coordinates for Georgia Cities:

I created own table with Coordinates (Latitude and Longitude) using Google Maps. That info will be merged with data from Cities and Counties. [2]

```
df2.head()
```

[5]:

| | City | Latitude | Longitude | Google URL |
|---|---|---|---|---|
| 0 | Baxley | 31.7632088 | -82.420583 | https://www.google.com/maps/place/Baxley,+Geor... |
| 1 | Graham | 31.8283134 | -82.519823 | https://www.google.com/maps/place/Graham,+Geor... |
| 2 | Surrency | 31.7216402 | -82.207543 | https://www.google.com/maps/place/Surrency,+Ge... |
| 3 | Pearson | 31.2975054 | -82.871033 | https://www.google.com/maps/place/Pearson,+Geo... |
| 4 | Willacoochee | 31.3232856 | -82.989815 | https://www.google.com/maps/place/S+Atkinson+B... |

## 3.- Foursquare API Data:

We use "**Foursquare API**" to extract data from the most common venues of each city in Atlanta. It will help us to provide the options in the comparative analysis. [3]

**Define Foursquare Credentials and Version**

```
CLIENT_ID = 'GGC3K0AGI0AZI2UUM1NGQBNQPSNJ44RREQYWHTJ00FANW443' # your Foursquare ID
CLIENT_SECRET = '2TGU23WQQKEITSG1011ZFXSG0DENDH5QCORZCXBFUMOVRRLC' # your Foursquare Secret
VERSION = '20180605' # Foursquare API version

print('Your credentails:')
print('CLIENT_ID: ' + CLIENT_ID)
print('CLIENT_SECRET:' + CLIENT_SECRET)

Your credentails:
CLIENT_ID: GGC3K0AGI0AZI2UUM1NGQBNQPSNJ44RREQYWHTJ00FANW443
CLIENT_SECRET:2TGU23WQQKEITSG1011ZFXSG0DENDH5QCORZCXBFUMOVRRLC
```

## 4.-School, Colleges, University ranking and price of house rental Data

I create own tables for School, Colleges, University Ranking extracting from different websites It will help us to provide ranking analysis. [4]

```
df3.head()
```

6]:

| | School | City | Average Standard Score (2019) | Rank (2018) |
|---|---|---|---|---|
| 0 | Allatoona High School | Cobb County | 80.5 | 33.0 |
| 1 | Alpharetta High School | Fulton County | 87.8 | 19.0 |
| 2 | Arabia Mountain High School - Academy of Engin... | DeKalb County | 64.0 | 87.0 |
| 3 | Archer High School | Gwinnett County | 72.7 | 46.0 |
| 4 | Bleckley County High School | Bleckley County | 71.1 | 50.0 |

```
df4.head()
```

[7]:

| | City | Average Rent October |
|---|---|---|
| 0 | Acworth, GA | $1,121 |
| 1 | Alpharetta, GA | $1,488 |
| 2 | Atlanta, GA | $1,475 |
| 3 | Augusta, GA | $850 |
| 4 | Austell, GA | $1,027 |

```
df5.head()
```

[8]:

| | University | City | University.1 | Rank |
|---|---|---|---|---|
| 0 | Georgia Institute of Technology | Atlanta | Georgia Institute of Technology | 1 |
| 1 | Georgia State University | Atlanta | Georgia State University | 2 |
| 2 | University of Georgia | Athens | University of Georgia | 3 |
| 3 | Emory University | Atlanta | Emory University | 4 |
| 4 | Kennesaw State University | Kennesaw | Kennesaw State University | 5 |

## References:

- [1] Georgia — Wikipedia : https://en.wikipedia.org/wiki/Georgia_(U.S._state)

- [2] Google Map : https://www.google.com/maps

- [3] Forsquare API : https://developer.foursquare.com/

- [4] Schools, University, Rental Houses websites :

    - https://www.schooldigger.com/go/GA/schoolrank.aspx?level=3#
    - https://www.rentcafe.com/blog/rental-market/local-rent-reports/georgia-rent-report-october-2019/
    - https://www.4icu.org/us/georgia/