

Arcades in New York City: Where to find them and where to open one

An analysis by Scott Wiley





Why Arcades?

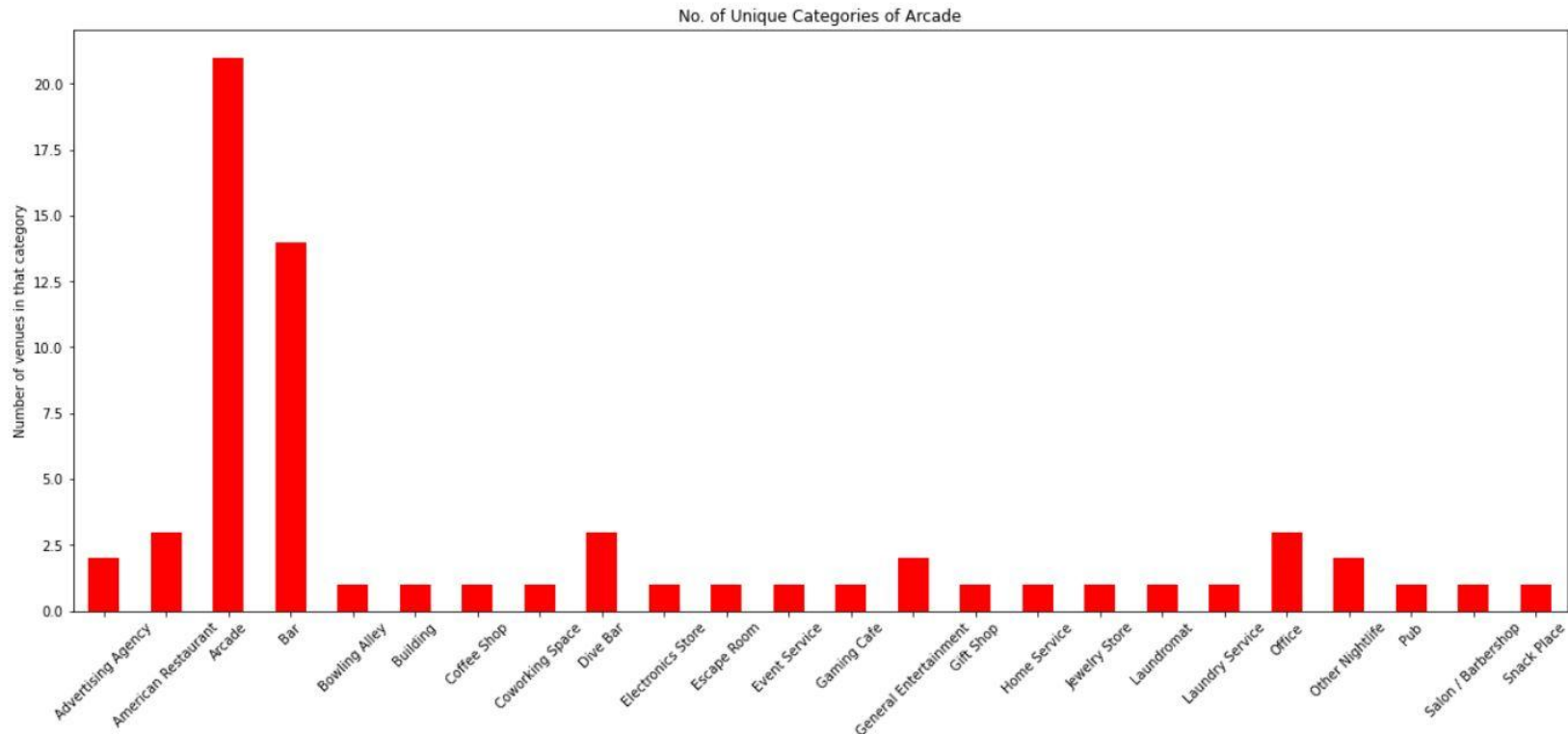
- Arcades have been on the decline in the U.S. for quite some time, however, they are by no means dead.
- New ways of reinventing arcades have become increasingly popular, including combining them with other venues like bars and even laundromats
- For game-oriented people, arcades can hold a bit of a nostalgia factor, and arcade-only games are still sought after by collectors and players who want to experience them firsthand
- When I personally go to a place, the first thing I look for is whether there's an arcade around, as the arcades that do remain will often have rare cabinets or other items



The Data

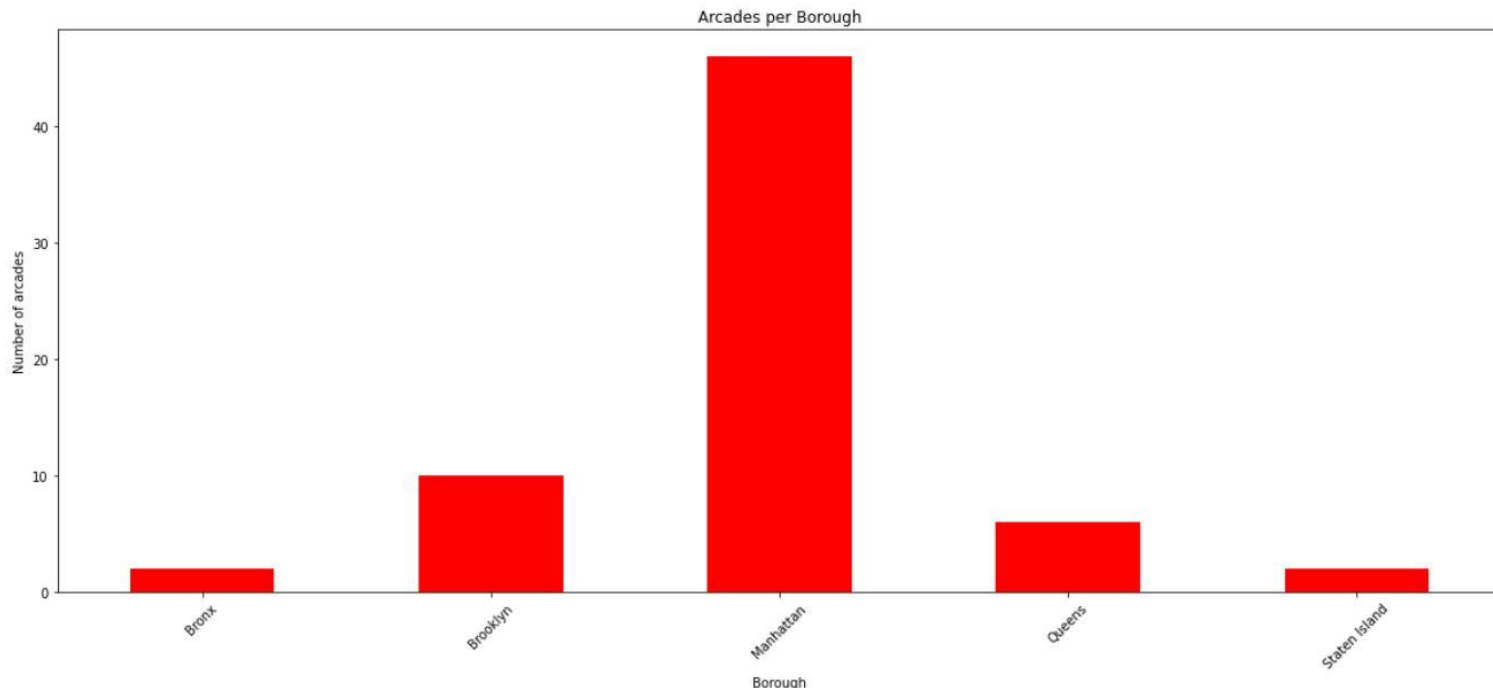
- New York city location data including boroughs, neighborhoods, as well as geospatial coordinates for each neighborhood. This was acquired from the IBM Developer Skills lab network as a JSON that was later converted into a Pandas dataframe
- The FourSquare API's database of venue locations. This was cut down using a category ID so that we only pulled locations that were considered arcades.

Variety of Arcade Venues in NYC

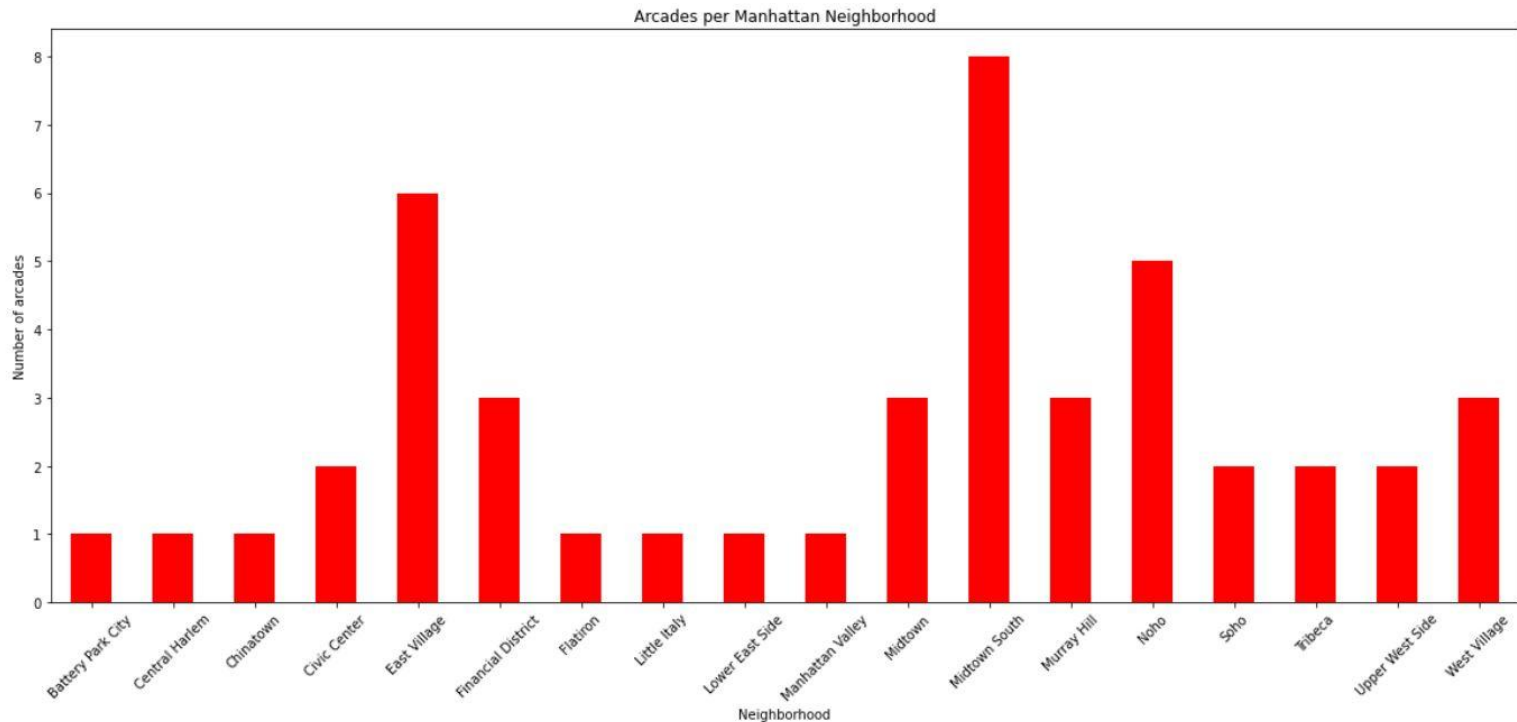




Number of Arcades per Borough



Where in Manhattan are all those arcades?



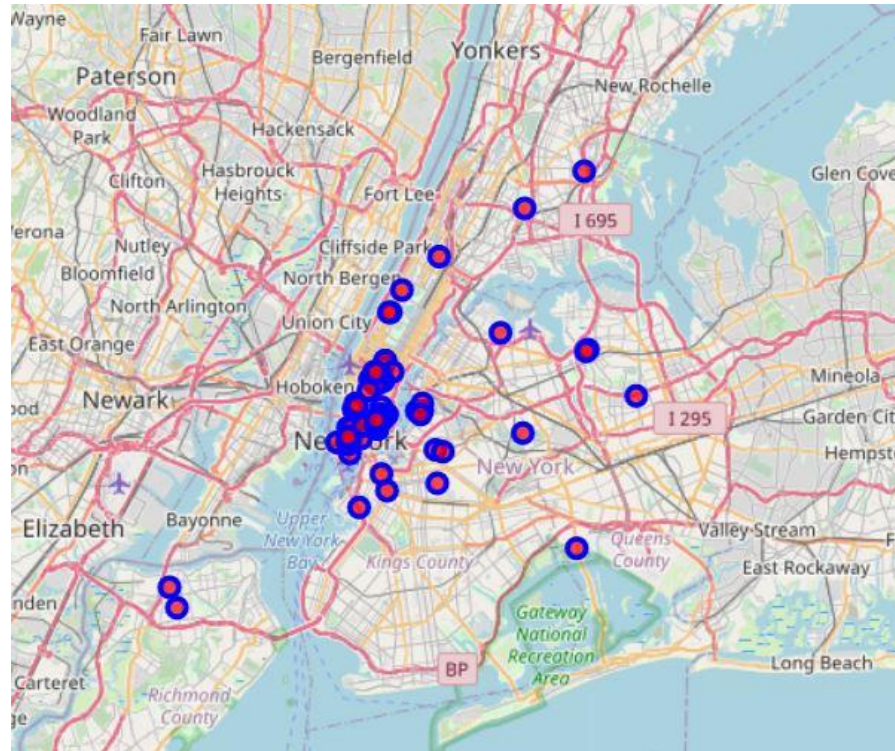


- Mostly in the south end of Manhattan
- A few stragglers by Central Park



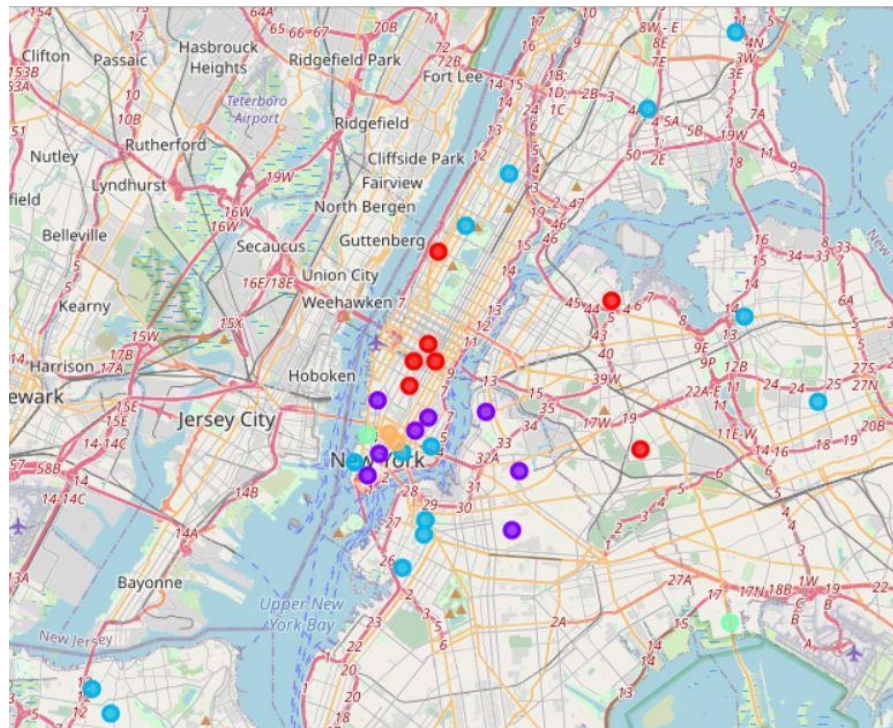
How about in all of NYC?

- Biggest cluster is still in Manhattan
- Arcades are incredibly spread out across the city, and are in very sparse numbers



Let's cluster our map by venue...

- K-means clustering with a k of 5
- Three clusters are widespread. According to report, there's a variety cluster, a bar cluster, an arcade cluster, and two clusters both corresponding to specific venues, implying model might've been overfit
- Ultimately doesn't change outcome





Results

- Best place to open an arcade? East Village in Manhattan
- Arcades still seem fairly popular, and you theoretically aren't facing as much competition from Midtown South
- Best type of arcade to open there? Anything but a barcade

----East Village----

	venue	freq
0	Bar	0.50
1	Dive Bar	0.33
2	Arcade	0.17
3	Advertising Agency	0.00
4	Gift Shop	0.00



Results (cont.)

- Best place to go touring for arcades is Midtown South in Manhattan
- Earlier bar graph showed it had the most arcade venues
- Onehot encoding to gather venue frequencies shows it also has the most variety
- Picture only shows top 5, so there's actually more categories than this

```
----Midtown South----  
      venue  freq  
0      Office  0.25  
1        Bar  0.12  
2  Electronics Store  0.12  
3    Event Service  0.12  
4 American Restaurant  0.12
```



In Summary...

- There are about 66 arcade venues in all of NYC, at least according to FourSquare's data
- The vast majority of them are in Manhattan
- If you want to open an arcade in a pre-established place with a scene, open one in Manhattan
- Maybe open it in East Village, since Midtown South seems to have a lot of competition.
- If you do this, don't make it a barcade if you want to stand down a bit more
- If you want to go to NYC and hit as many different arcades as possible, head to Midtown South