



# Capstone Presentation on Museum Density in NYC and Boston



# I want to move, but where to go?

- I am a museum enthusiast and software developer looking to move to the North East. Philadelphia is clearly the best city in the North East, so let's see who can compete for second place
- We will determine which city has the higher museum dense neighborhood and by this single metric we will select a winner



# How will we do it?

- First we find a list of zip codes and corresponding neighborhoods in NYC and Boston.
- Boston: [http://archive.boston.com/news/local/articles/2007/04/15/sixfigurezipcodes\\_city/](http://archive.boston.com/news/local/articles/2007/04/15/sixfigurezipcodes_city/)
- NYC: <https://www.health.ny.gov/statistics/cancer/registry/appendix/neighborhoods.htm>

 Then we cross reference this info with a dataframe containing all US zip codes and their corresponding geolocational coordinates

	Neighborhood	Latitude	Longitude
02101	Downtown Boston	42.370567	-71.026964
02108	Beacon Hill	42.357903	-71.064080
02109	Markets	42.361477	-71.054170
02109	Inner Harbor	42.361477	-71.054170
02110	Financial District	42.356532	-71.053650
02110	Wharves	42.356532	-71.053650
02111	Chinatown	42.349838	-71.061010



**The Foursquare API allows us to use this data to collect which neighborhoods have the highest proportion of museum**






# Ok! We're shipping up to Boston!

```
bestNY = neighborhoodMax(nyGrouped)
bestBST = neighborhoodMax(bstGrouped)
print('The best neighborhood for museums in NYC is {}, with a proportion of {} museums in the neighborhood!'.format(bestNY[0],
                                                                 bestNY[1]))
print('The best neighborhood for museums in Boston is {}, with a proportion of {} museums in the neighborhood!'.format(bestBST[0],
                                                                 bestBST[1]))
```

The best neighborhood for museums in NYC is Bronx Park and Fordham, with a proportion of 0.02777777777777776 museums in the neighborhood!

The best neighborhood for museums in Boston is East Fens, with a proportion of 0.15625 museums in the neighborhood!



**Let's take a look at where our new home is. Check out the red marker on the next page.**



