Which Boston
College/University
to start my career
as a Data Scientist?

Business Problem

Which college or university in the Greater Boston do I want to work for?

I am going to leverage the power of public datasets and location data to select a school which I think will best fit my new career as a data scientist.



School Must

- -be located in the Greater Boston Area
- have over 5000 students. As a data scientist, I am going to need to intake as much data as possible and believe that 5000 is an acceptable minimum to retrieve valuable and diverse data.
- -Sports Complexes/Arenas must be popular venues within the 500M radius of campus.

 Athletics is an industry with high demands for data scientists and I would like to work at a school with opportunities to study their athletic programs.
- -School must have access to public transportation in the immediate radius (500M)

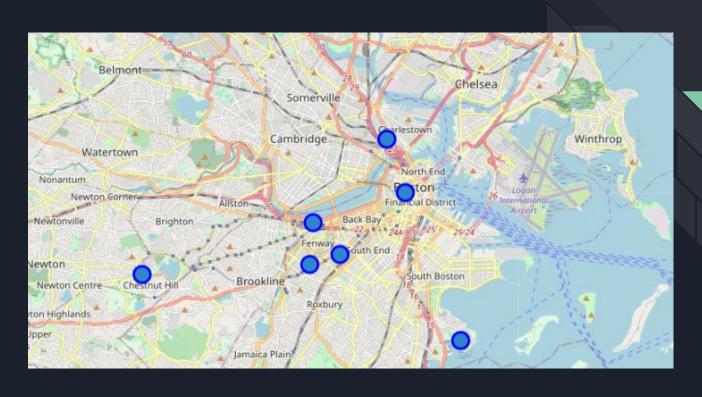
Data Acquisition and Cleaning

- School Name, Location Coordinates and Number of Students in 2013
 (*most recent year) retrieved from https://data.boston.gov/dataset
- List included over 59 rows and 30 features
- Cleaned dataset to contain only 4 features

Boston Schools with 5000+ Students

| | Name | Latitude | Longitude | NumStudents13 |
|---|------------------------------------|-----------|------------|---------------|
| 0 | Boston University | 42,349560 | -71.099709 | 32411 |
| 1 | University of Massachusetts-Boston | 42.313809 | -71.039202 | 16277 |
| 2 | Boston College | 42.333833 | -71.169719 | 14309 |
| 3 | Bunker Hill Community College | 42.375117 | -71.069572 | 14023 |
| 4 | Suffolk University | 42.358905 | -71.061948 | 8675 |
| 5 | Northeastern University | 42.340048 | -71.088892 | 8479 |
| 6 | MCPHS University | 42.336880 | -71.101120 | 6548 |

Boston Schools with 5000+ Students Coordinates



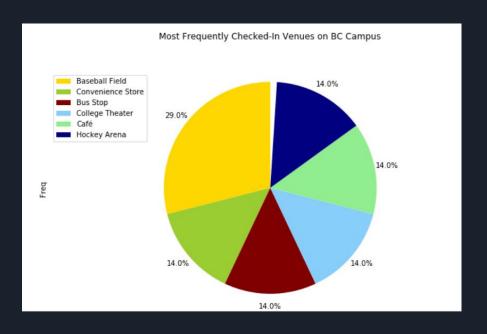
Most Frequently Checked-In Places within 500M of each college via FourSquare API

| | School | 1st Popular Venue | 2nd Popular Venue | 3rd Popular Venue | 4th Popular Venue | 5th Popular Venue | 6th Popular Venue | 7th Popular Venue | 8th Popular Venue | 9th Popular Venue | 10th Popular Venue |
|---|---------------------------------------|------------------------|----------------------|-----------------------|-----------------------------|------------------------------|----------------------|----------------------|-------------------------|-------------------------|-----------------------|
| 0 | Boston College | Baseball Field | College Theater | Convenience Store | Hockey Arena | Café | Bus Stop | Food Court | Cosmetics Shop | Deli / Bodega | Department Store |
| 1 | Boston University | American Restaurant | Lounge | Sports Bar | Coffee Shop | Hotel | Sushi Restaurant | Café | Pub | Gym / Fitness Center | Brewery |
| 2 | Bunker Hill Community College | Coffee Shop | Yoga Studio | Shopping Mall | Bank | Convenience Store | Donut Shop | Gastropub | Grocery Store | Light Rail Station | Liquor Store |
| 3 | MCPHS University | Coffee Shop | Sushi Restaurant | Sandwich Place | Convenience Store | Pizza Place | Pub | Donut Shop | Café | Falafel Restaurant | Gastropub |
| 4 | Northeastern University | Sandwich Place | Pizza Place | Grocery Store | Arts & Crafts Store | Middle Eastern Restaurant | Concert Hall | Café | Caribbean Restaurant | Burrito Place | Restaurant |
| 5 | Suffolk University | Coffee Shop | Historic Site | Seafood Restaurant | Mediterranean Restaurant | New American Restaurant | Hotel | Restaurant | American Restaurant | Market | Italian Restaurant |
| 6 | University of Massachusetts-Boston | Museum | Coffee Shop | Donut Shop | Fast Food Restaurant | Food Court | Concert Hall | Convenience Store | Cosmetics Shop | Deli / Bodega | Department Store |

Results

I will apply to become a data scientist at.....

Boston College



- 3 venues in the Top 10 Most Frequently Checked in Places
 - -Baseball Field
 - -Hockey Arena
 - -Bus Stop

Conclusion

I analyzed the surrounding neighborhoods of seven colleges located in Boston, MA leveraging the FourSquare API to make the ultimate decision to apply to Boston College to begin my career as a Data Scientist.

- -Popular sports complexes (hockey arena/baseball field) can be home to data science initiatives to predict future success of athletes and athletics programs.
- -Location data can be further leveraged to select a neighborhood to move into.