










# Which American University will it be?






 Harvard University  







## Harvard University

4.4 ★★★★★ (5,238)  
University

 Directions  Save  Nearby  Send to your phone  Share






 Cambridge, MA, United States  
 9VGM+R8 Cambridge, Massachusetts, United States  
 harvard.edu  
 +1 617-495-1000  
 Add a label

 Columbia University  








## Columbia University

4.5 ★★★★★ (1,320)  
University

 Directions  Save  Nearby  Send to your phone  Share

Set in Upper Manhattan, this 1754 Ivy League school focuses on medicine, business, the arts & more.

 116th St & Broadway, New York, NY 10027, United States  
 R25P+2X New York, United States  
 columbia.edu  
 +1 212-854-1754  
 Add a label

## A. Introduction

I am Carina Siman, currently living in Cape Town, South Africa. Me and my family are frequent travelers and the number one destination is and will always be in America. My children shared the love of this country and decided to obtain their higher education in America.

My child received bursaries from both Harvard University, Cambridge, Massachusetts and Columbia University, Upper Manhattan, New York.

My child is also an aspiring athlete. She qualified for and is taking part in the heptathlon event in the Olympics 2020 as well as in the ice hockey event in the Winter Olympics 2020.

## B. Business Problem

We are all very excited about this new adventure in our lives however we need to determine which bursary to accept taking into account the following factors:

1. Are the highly rated athletic tracks, gyms and swimming pools close to the university?
2. Are the ice hockey facilities such as ice rinks close by?
3. These facilities must be available after hours as she will be studying during the day.
4. These facilities must also be close to public transport.

## C. Data description

The following data were utilized to get to the facts:

1. I used Google Maps to search for and get the coordinates for Columbia Medical School and Harvard Medical School.
2. I used the Foursquare API to search for an Athletic Track close to the Medical Schools.

## D. Methodology

I used the following methods to get the data:

1. Firstly I have imported my libraries and packages that I would use in the exercise.
2. As I am using the Foursquare API I had to make sure that my credentials are still correct.
3. I then used the Search method on the API to search for an Athletic Track close to each of the Medical Schools - the results varied pretty much:
  - a. Results for Harvard Medical School

```

Out[13]:

```

	name	categories	address	cc	city	country	crossStreet	distance	formattedAddress	labeledLatLngs	lat	lng	postalCode	state	id
0	Vanderbilt Hall Athletic Facility	Gym	107 Avenue Louis Pasteur	US	Boston	United States	at Longwood Ave	233	[107 Avenue Louis Pasteur (at Longwood Ave), B...	[{'label': 'display', 'lat': 42.33771742094740...	42.337717	-71.103774	02115	MA	4ed67a5d9adf5095962f1974

```

In [14]: HMS_Data_filtered.name
Out[14]: 0    Vanderbilt Hall Athletic Facility
          Name: name, dtype: object

In [21]: HMS_Data_filtered.distance
Out[21]: 0    233
          Name: distance, dtype: int64

```

b. Results for Columbia Medical School:

```

In [35]: HMS_Data_filtered.name
Out[35]: 0    New Balance Track & Field Center at The Armory
          1    Bard Athletic Center
          2    Finish Line Cafe (@ New Balance Track and Fie...
          3    Armory Track & Field
          4    Police Athletic League (P.A.L.)
          Name: name, dtype: object

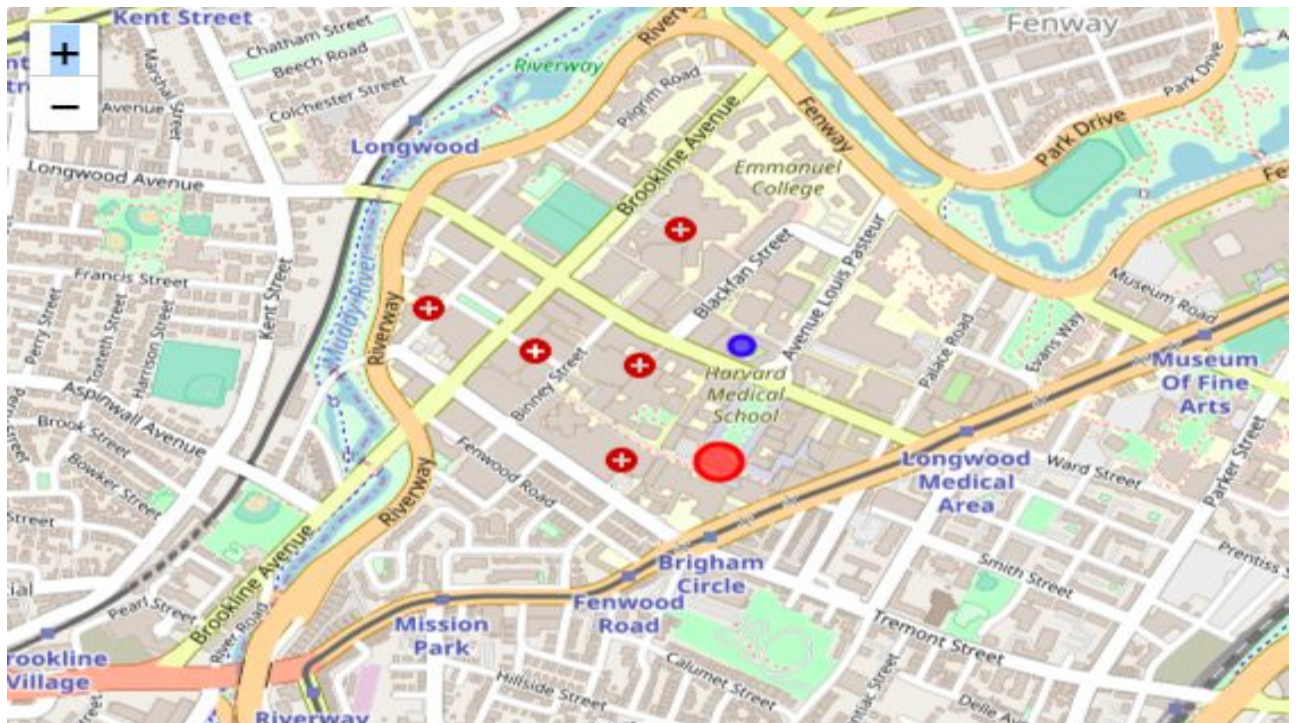
In [36]: HMS_Data_filtered.distance
Out[36]: 0    82
          1    261
          2    73
          3    50
          4    96
          Name: distance, dtype: int64

```

4. To visualize the facts if used Python Folium to pinpoint the exact locations of the athletic tracks:
- a. Harvard Medical School:



- b. Columbia Medical School:



5. I also used GitHub repository for all my master data components.

## **E. Results**

As can be seen from D.3 and D.4 above the results look like follow:

1. Harvard Medical School only have 1 athletic track close by - distance of 233 from the school.
2. Columbia Medical School has a few to choose from which New Balance Track & Field is very popular.

## **F. Conclusion**

The results are giving us enough indication to make an informed decision.

As New Balance is one of my child's sponsors Columbia Medical School will be the preferred School to go to.

## **G. References:**

<https://www.google.com/maps/place/Harvard+University/@41.7746268,-74.2282055,7.81z/data=!4m5!3m4!1s0x0:0x5937c65cee2427f0!8m2!3d42.3770029!4d-71.1166601>

<https://www.google.com/maps/place/Columbia+University/@40.8075636,-74.0938965,11z/data=!4m5!3m4!1s0x0:0x577933f947e52750!8m2!3d40.8075355!4d-73.9625727>