

# Applied Data Science Capstone

AAMC Medical Schools for Coffee-  
Drinking, Pizza-Eating, and Park-Loving  
Medical Students

4/11/2021

AAMC member medical schools analyzed using Foursquare Places API data and ArcGIS coordinates as well as Python programming including the Numpy, Pandas, Matplotlib, BeautifulSoup 4, Folium, Scikit-learn, and SciPy libraries



FOURSQUARE ArcGIS



Folium



Identifying AAMC member medical schools that would appeal to coffee lovers, pizza lovers, and park lovers. Also grouping the medical schools by other food type categories.

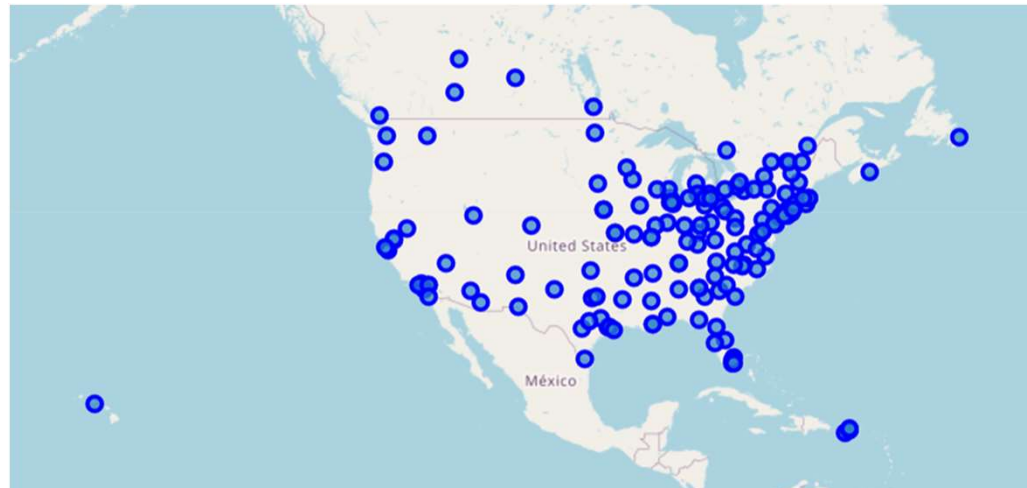
- Pre-med students have many things to consider when selecting which medical school to attend
- This presentation will identify which medical schools are near the following:
  - Coffee shops
  - Pizza places
  - Other types of restaurants
  - Parks

## AAMC member medical schools

AAMC member medical schools were identified in the html code of the AAMC member medical school webpage. Then the addresses of those schools were run through a Python geocoder using ArcGIS to get the coordinates of the schools. Here we can see the first and last five of the 172 AAMC medical schools and a map showing all of the AAMC member medical schools in the United States and Canada.

	Medical_School_Name	City_State_Postal_Code	Country
0	Albany Medical College	Albany, NY 12208-3412	UNITED STATES
1	Albert Einstein College of Medicine	Bronx, NY 10461-1900	UNITED STATES
2	Baylor College of Medicine	Houston, TX 77030-3411	UNITED STATES
3	Boston University School of Medicine	Boston, MA 02118-2307	UNITED STATES
4	Brody School of Medicine at East Carolina Univ...	Greenville, NC 27834-4300	UNITED STATES
...	...	...	...
167	Weill Cornell Medicine	New York, NY 10065-4805	UNITED STATES
168	West Virginia University School of Medicine	Morgantown, WV 26506-9100	UNITED STATES
169	Western Michigan University Homer Stryker M.D....	Kalamazoo, MI 49008-1282	UNITED STATES
170	Wright State University Boonshoft School of Me...	Dayton, OH 45401-0927	UNITED STATES
171	Yale School of Medicine	New Haven, CT 06510-3206	UNITED STATES

172 rows × 3 columns



## AAMC member medical schools with coffee shops

Foursquare Places API data was used to identify select nearby venues for the AAMC member medical schools including coffee shops, pizza places, other types of restaurants, and parks. The AAMC member medical schools were then ranked for most coffee shops, pizza places, and parks. The AAMC member medical schools were also grouped by what other restaurant types they have in common. To the right we are seeing the top 25 AAMC member medical schools with the most coffee shops and cafes for coffee-loving medical students.

Medical_School_Name	Coffee_Shop_Count
University of Washington School of Medicine	23
Sidney Kimmel Medical College at Thomas Jefferson University	22
Tufts University School of Medicine	22
University of California, Los Angeles David Geffen School of Medicine	22
Northwestern University The Feinberg School of Medicine	21
Harvard Medical School	21
University of British Columbia Faculty of Medicine	19
Weill Cornell Medicine	18
Washington State University Elson S. Floyd College of Medicine	18
University of Michigan Medical School	17
Emory University School of Medicine	16
Columbia University Vagelos College of Physicians and Surgeons	16
George Washington University School of Medicine and Health Sciences	16
Carle Illinois College of Medicine	15
University of Toronto Temerty Faculty of Medicine	15
University of Chicago Division of the Biological Sciences The Pritzker School of Medicine	14
Kaiser Permanente Bernard J. Tyson School of Medicine	13
University of Pittsburgh School of Medicine	13
University of Hawaii, John A. Burns School of Medicine	13
Universite de Montreal Faculty of Medicine	13
Baylor College of Medicine	13
University of Texas at Austin Dell Medical School	12
Perelman School of Medicine at the University of Pennsylvania	11
McGill University Faculty of Medicine and Health Sciences	11
Mayo Clinic Alix School of Medicine	11

# Top 25 AAMC member medical schools for pizza and parks

## Top 25 AAMC member medical schools for pizza:

Medical_School_Name	Pizza_Place_Count
New York University Grossman School of Medicine	21
Sidney Kimmel Medical College at Thomas Jefferson University	18
Weill Cornell Medicine	12
Columbia University Vagelos College of Physicians and Surgeons	11
CUNY School of Medicine	10
University of California, Los Angeles David Geffen School of Medicine	9
Icahn School of Medicine at Mount Sinai	8
Howard University College of Medicine	7
State University of New York Upstate Medical University	7
University of New Mexico School of Medicine	7
Northwestern University The Feinberg School of Medicine	7
University of Virginia School of Medicine	7
University of Texas at Austin Dell Medical School	6
University of Michigan Medical School	6
TCU and UNTHSC School of Medicine	6
The Warren Alpert Medical School of Brown University	6
Lewis Katz School of Medicine at Temple University	6
Kaiser Permanente Bernard J. Tyson School of Medicine	6
George Washington University School of Medicine and Health Sciences	6
Yale School of Medicine	5
University of Pittsburgh School of Medicine	5
New York University Long Island School of Medicine	5
University of Maryland School of Medicine	5
University of Texas Rio Grande Valley School of Medicine	5
Washington State University Elson S. Floyd College of Medicine	5

## Top 25 AAMC member medical schools for parks:

Medical_School_Name	Park_Count
Columbia University Vagelos College of Physicians and Surgeons	4
George Washington University School of Medicine and Health Sciences	2
Northwestern University The Feinberg School of Medicine	2
Ohio State University College of Medicine	2
State University of New York Downstate Medical Center College of Medicine	2
Tufts University School of Medicine	2
CUNY School of Medicine	1
University of Hawaii, John A. Burns School of Medicine	1
Wake Forest School of Medicine of Wake Forest Baptist Medical Center	1
University of New Mexico School of Medicine	1
University of Minnesota Medical School	1
University of Michigan Medical School	1
University of Massachusetts Medical School	1
The Warren Alpert Medical School of Brown University	1
University of California, Davis, School of Medicine	1
Universite de Montreal Faculty of Medicine	1
Sidney Kimmel Medical College at Thomas Jefferson University	1
Rutgers, Robert Wood Johnson Medical School	1
Icahn School of Medicine at Mount Sinai	1
Cooper Medical School of Rowan University	1
Washington University in St. Louis School of Medicine	1

See the project notebook for the clusters that will help pre-med students identify medical schools with nearby food trucks, deli/bodegas, bakeries, sandwich places, fast food restaurants, food courts, American restaurants, Indian restaurants, wings joints, snack places, Czech restaurants, cafeterias, dim sum restaurants, diners, Eastern European restaurants, falafel restaurants, Ethiopian restaurants, empanada restaurants, and dumpling restaurants.

# Conclusion

The analysis shows that the top five AAMC member medical schools to go to for coffee lovers are:

1. University of Washington School of Medicine
2. Sidney Kimmel Medical College at Thomas Jefferson University
3. Tufts University School of Medicine
4. University of California, Los Angeles David Geffen School of Medicine
5. Northwestern University The Feinberg School of Medicine

The analysis shows that the top five AAMC member medical schools to go to for pizza lovers are:

1. New York University Grossman School of Medicine
2. Sidney Kimmel Medical College at Thomas Jefferson University
3. Weill Cornell Medicine
4. Columbia University Vagelos College of Physicians and Surgeons
5. CUNY School of Medicine

The analysis shows that the top five AAMC member medical schools to go to for park lovers are:

1. Columbia University Vagelos College of Physicians and Surgeons
2. George Washington University School of Medicine and Health Sciences
3. Northwestern University The Feinberg School of Medicine
4. Ohio State University College of Medicine
5. State University of New York Downstate Medical Center College of Medicine