

## Find the stations most crowded to set up the centers of COVID-19 vaccine

### Overview:

I Plan to find which stations are more crowded of people by using the MTA turnstile dataset through exploratory data analysis. Then choose the most three stations crowded to set up centers of Covid-19 vaccine. I will study the data for the last three months.

### Dataset Description:

Using MTA turnstile data set that have 11 features:

FEATURE	DESCRIPTION
C/A	Control Area
UNIT	Remote Unit for a station
SCP	Subunit Channel Position represents a specific address for a device
STATION	The station names the device is located at.
LINENAME	All train lines that can be boarded at this station
DIVISION	The Line originally the station belonged to.
DATE	The date
TIME	The time for a scheduled audit event
DESc	Represent the "REGULAR" scheduled audit event (Normally occurs every 4 hours) 1. Audits may occur more than 4 hours due to planning, or troubleshooting activities. 2. Additionally, there may be a "RECOVR AUD" entry: This refers to a missed audit that was recovered.
ENTRIES	The turnstile's counter. It's recorded 6 times a day in 4-hour blocks, and it's a running cumulative total.
EXIST	The turnstile's counter. It's recorded 6 times a day in 4-hour blocks, and it's a running cumulative total.

## Derived Columns:

FEATURES	DESCRIPTION
Crowded	Add the entries and the exits columns to find which stations was the more crowd.

## Tools:

Using Pandas and NumPy packages to manipulate data and Matplotlib library for visualizing data in Jupyter notebook.

## Conclusion:

Identifying the most crowded stations and setting up centers for COVID-19 vaccine will benefit in raising the proportion of vaccine recipients, which will help control this pandemic by increasing the general rate of vaccination against COVID-19.