

# Exploratory Data Analysis

## Project Write-up

### Fri., April 2, 2021

#### **Abstract:**

An independent film company will be shooting a film called *Home & Away* in the Bronx, NYC beginning in August 2021. The primary filming location is Yankee Stadium, however five MTA subway stations are needed as secondary locations. Budget constraints are a concern and data analysis is needed to make sure the most cost efficient stations are used. I worked with data published weekly by the MTA summarizing entries and exits in the system in order to provide the necessary results and conclusions.

#### **Data Description:**

The data is the MTA turnstile published to the public weekly. Specifically the 13 weeks between July 27, 2019 and October 26, 2019 were used. Primary data fields included in the analysis were:

- Station
- Linename
- Date
- Cumulative Entries
- Cumulative Exits

#### **Algorithms:**

To my knowledge, no algorithms were used in this project. I expect this to change with future projects.

#### **Tools:**

SQLite for initial data storage and inspection  
SQLAlchemy to help load data into a Pandas Dataframe  
Pandas and Numpy for data manipulation  
Matplotlib and Seaborn for plotting

#### **Communication:**

I will be presenting results to the Exploratory Data Analysis cohort on Friday, April 2, 2021. A PDF of the presentation is also included on my personal GitHub repository.