

SECURITY FIRST AGENCY (SFA) PROJECT FOR SECURING MTA'S STATIONS

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MTA DATASET



- Metropolitan Transportation Authority (MTA)
- 12 weeks from July to September are selected for analyzing
- The data consist of 2514588 rows and 12 columns

	DATE_TIME	C/A	UNIT	SCP	STATION	LINENAME	DIVISION	DATE	TIME	DESC	ENTRIES	EXITS
0	2021-09-18 00:00:00	A002	R051	02-00-00	59 ST	NQR456W	BMT	09/18/2021	00:00:00	REGULAR	7637026	2613455

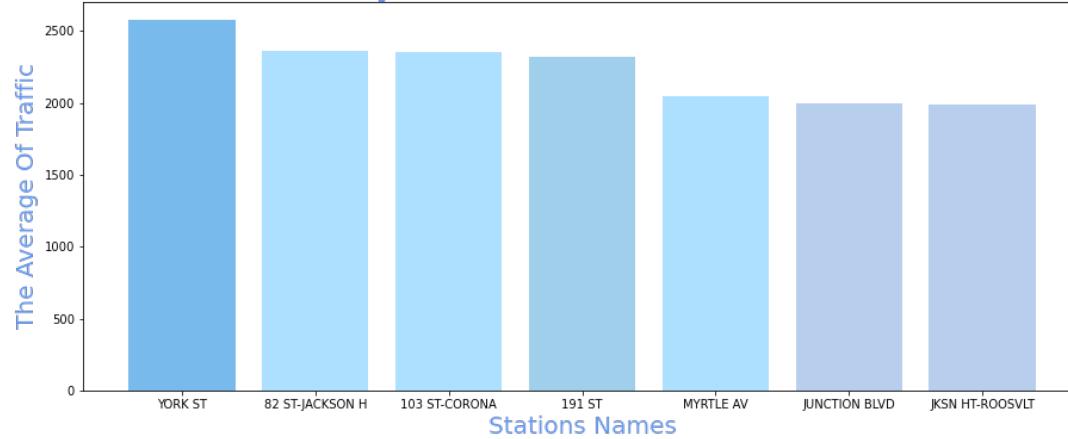


CLEANING DATA JOURNEY

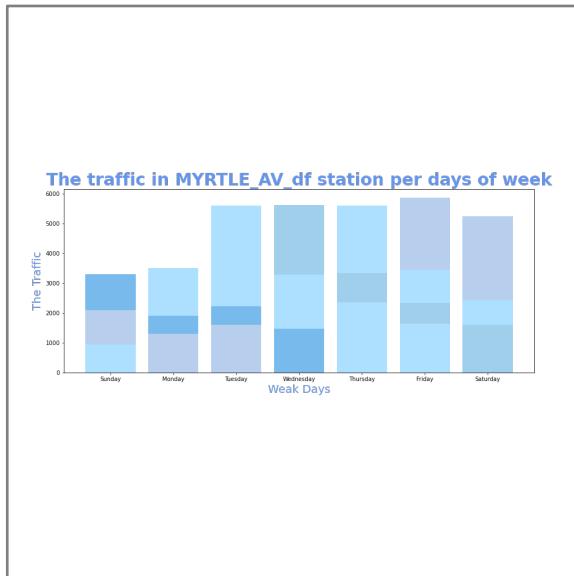
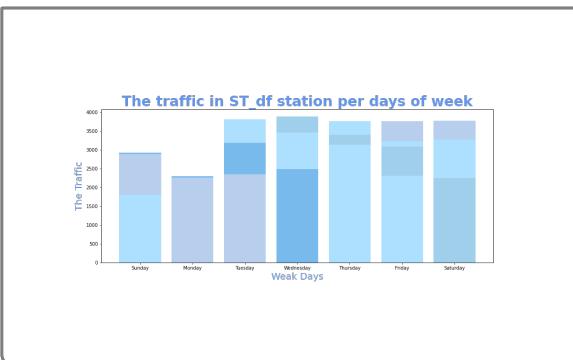
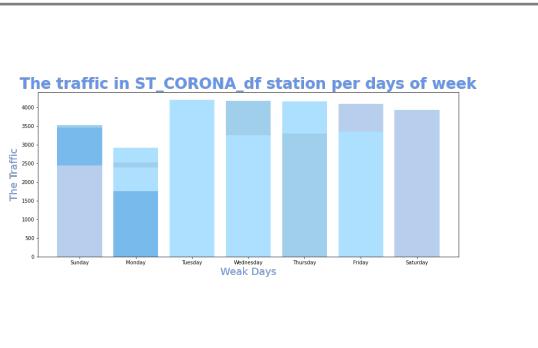
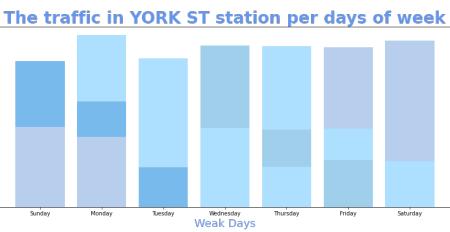
- white spaces
- Null values
- duplicated values
- Create "NAMEOFDAY" and "TIME_INTERVAL" columns
- cumulative, reverse values, and rest issues

ANALYZING ADVENTURE

The Top 7 Most Crowded Stations



ANALYZING ADVENTURE

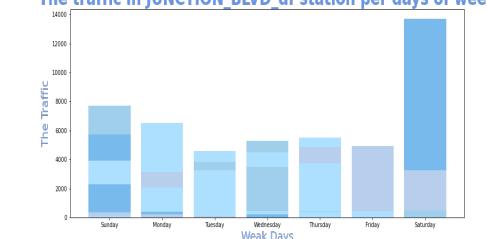


ANALYZING ADVENTURE

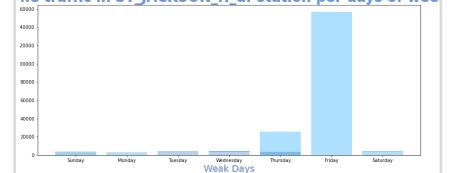
The traffic in JKSN_HT_ROOSVLT_df station per days of week



The traffic in JUNCTION_BLVD_df station per days of week



The traffic in ST_JACKSON_H_df station per days of wee





- **Conclusions**

- Given the results that we had We will recommend to focus on the top 7 stations that appear in Figure 1.
- also, In each station the number of security men need to be increase in the crowded days of week as we saw in Figure 2 and Figure 3.

- **Future work**

- We are planning to propose a schedule of security men shifts that depend in the traffic by time instead of depending only on days
- Also, we were planning to select the most crowded Control Area in each station to get it more attention when applying security controls