

Life in Melbourne as depicted by Pedestrians

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Introduction

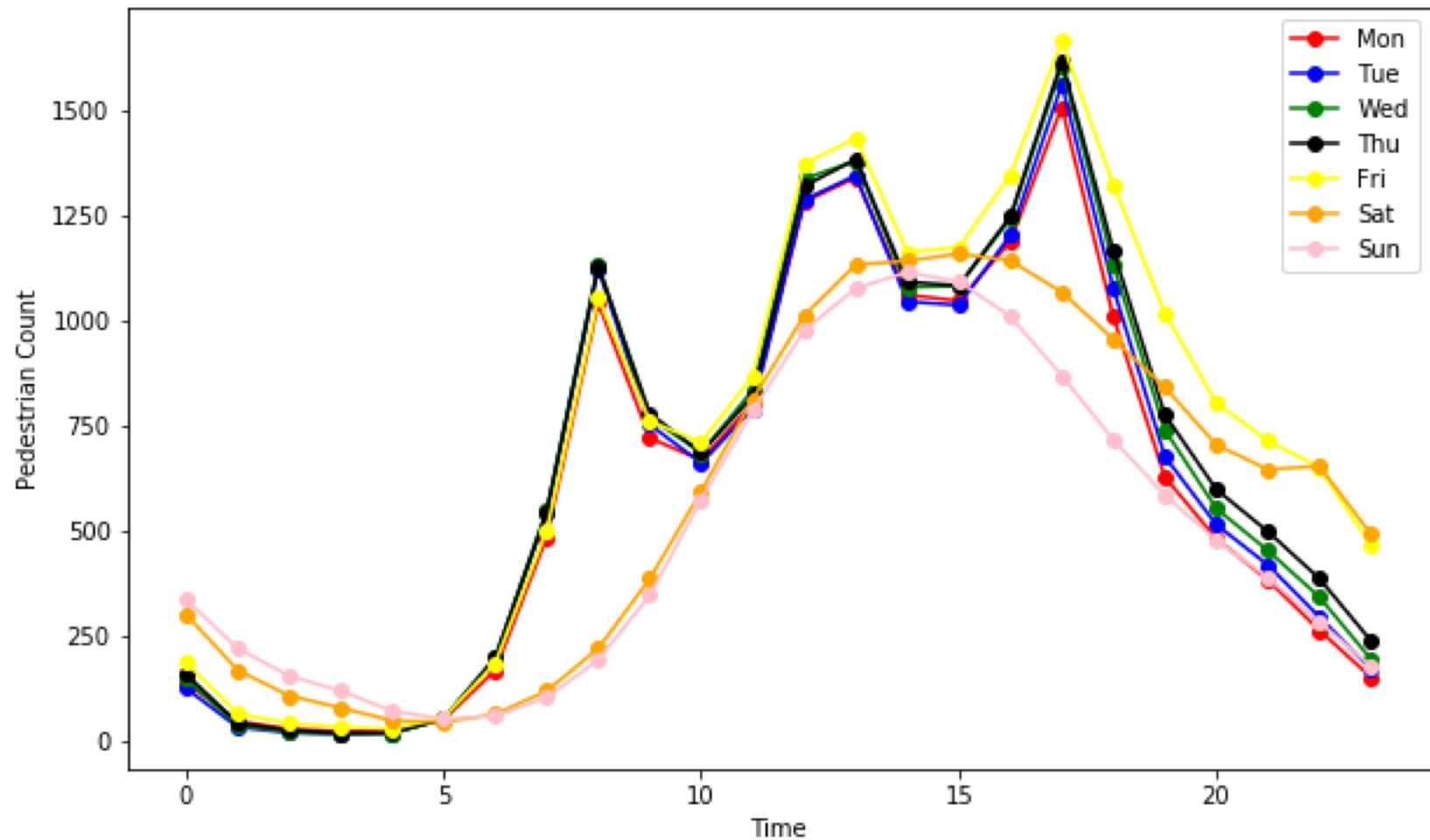
- Essential part of modern cities.
- Can help in deciding the place to open new business.
- Gives idea about the night life of people in the city.

Also, one can combine pedestrian data with other datasets to obtain useful information

- Weather data to study whether people go out on a rainy day
- Restaurant data to investigate the number of pedestrian vs popularity of restaurants

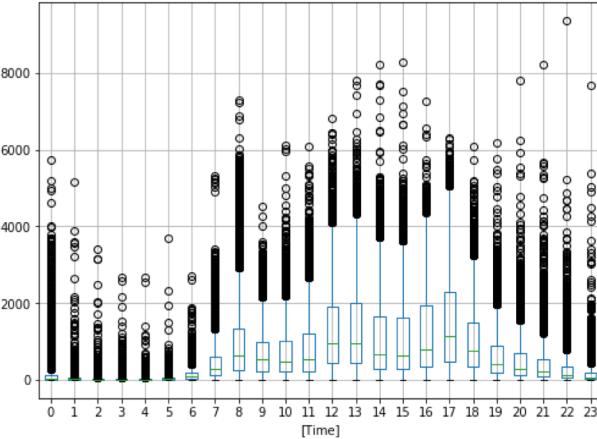
Exploratory data analysis

Foot Traffic trend with days of the week

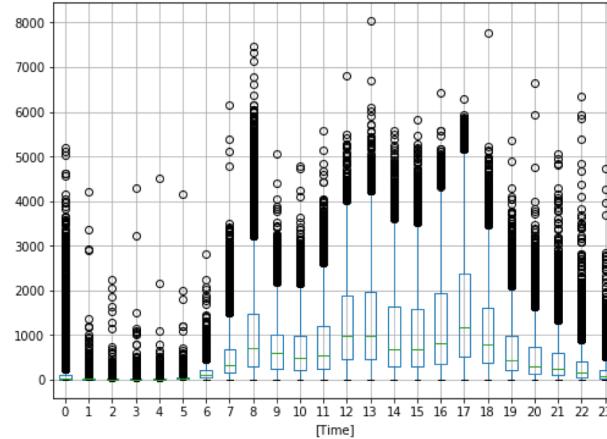


Foot Traffic by Hour

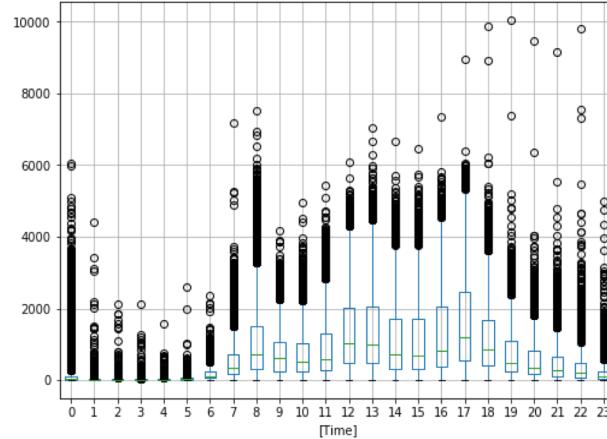
Mon



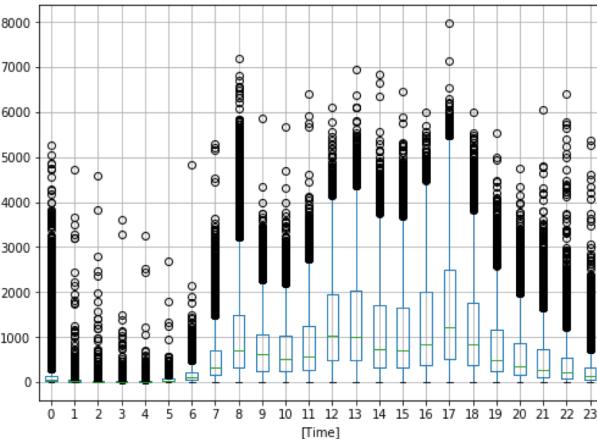
Tue



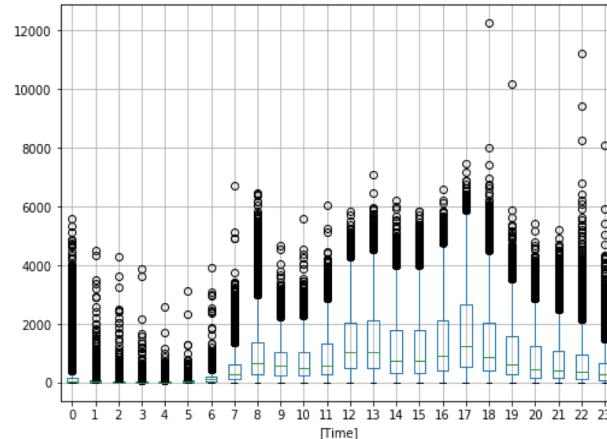
Wed



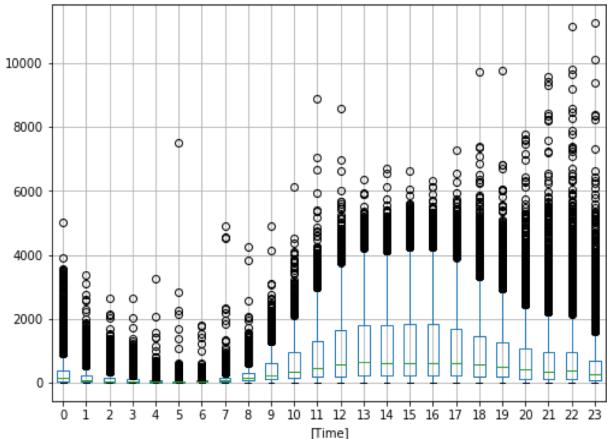
Thu



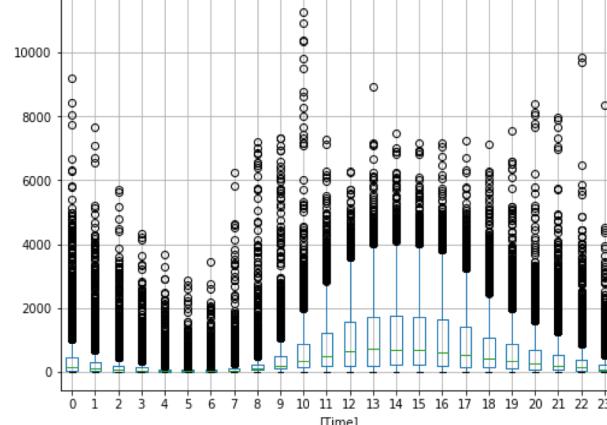
Fri



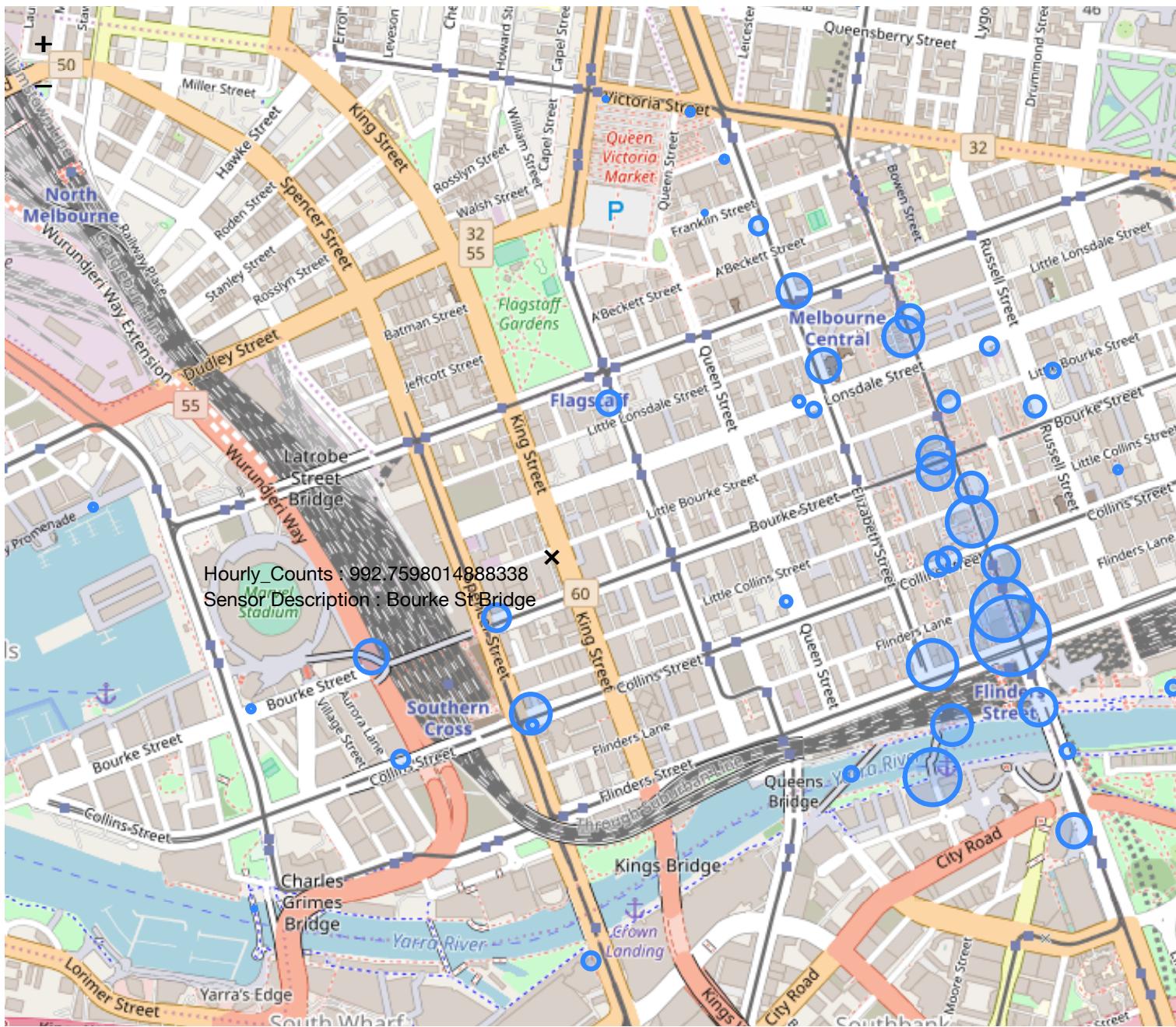
Sat



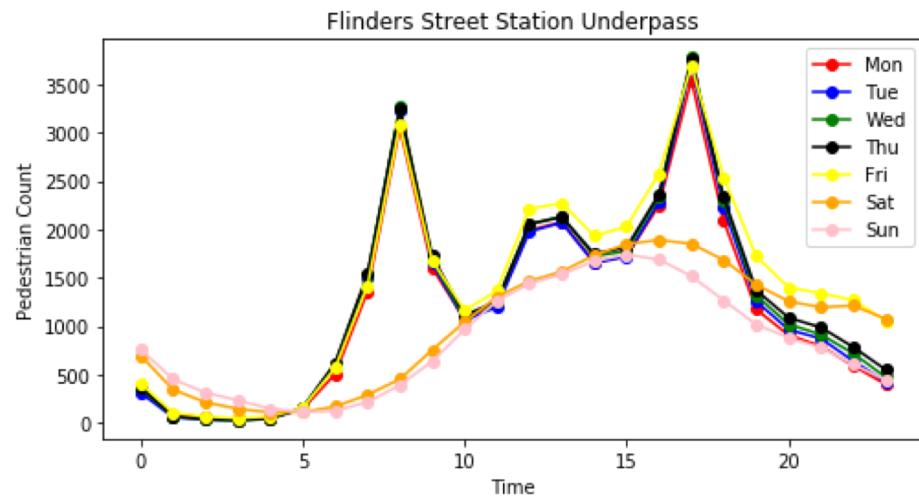
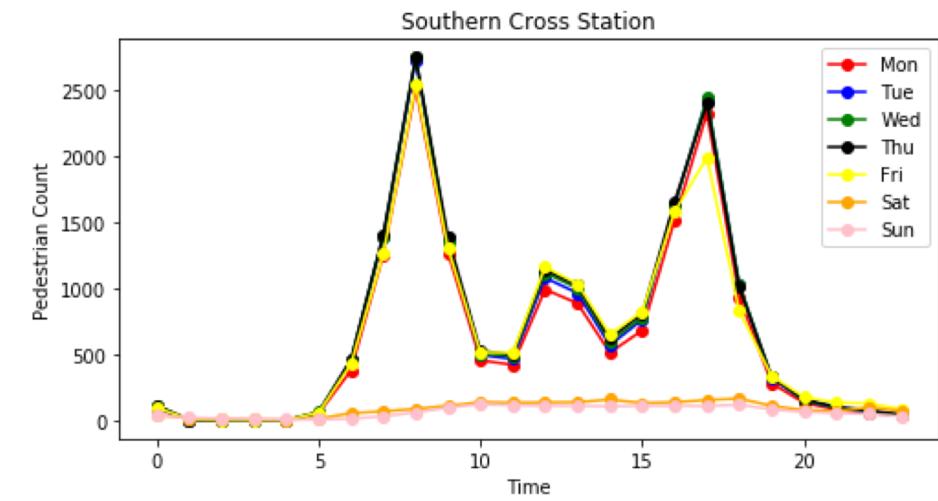
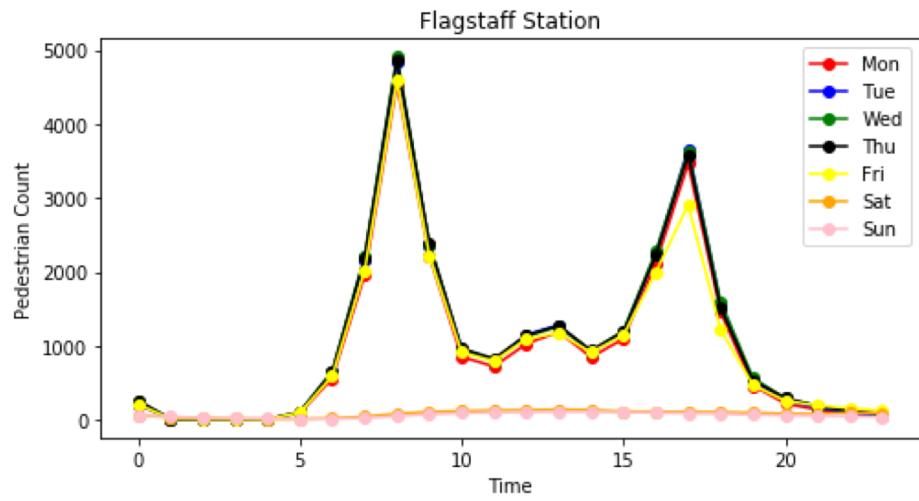
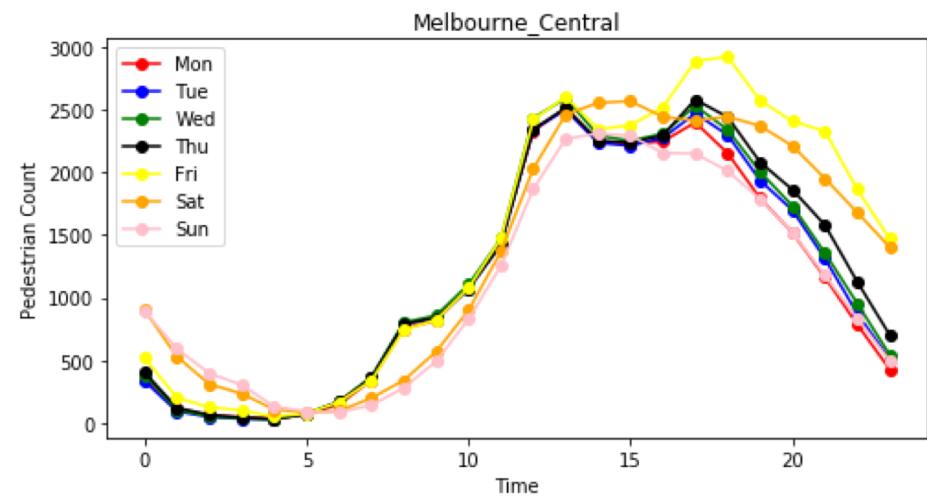
Sun



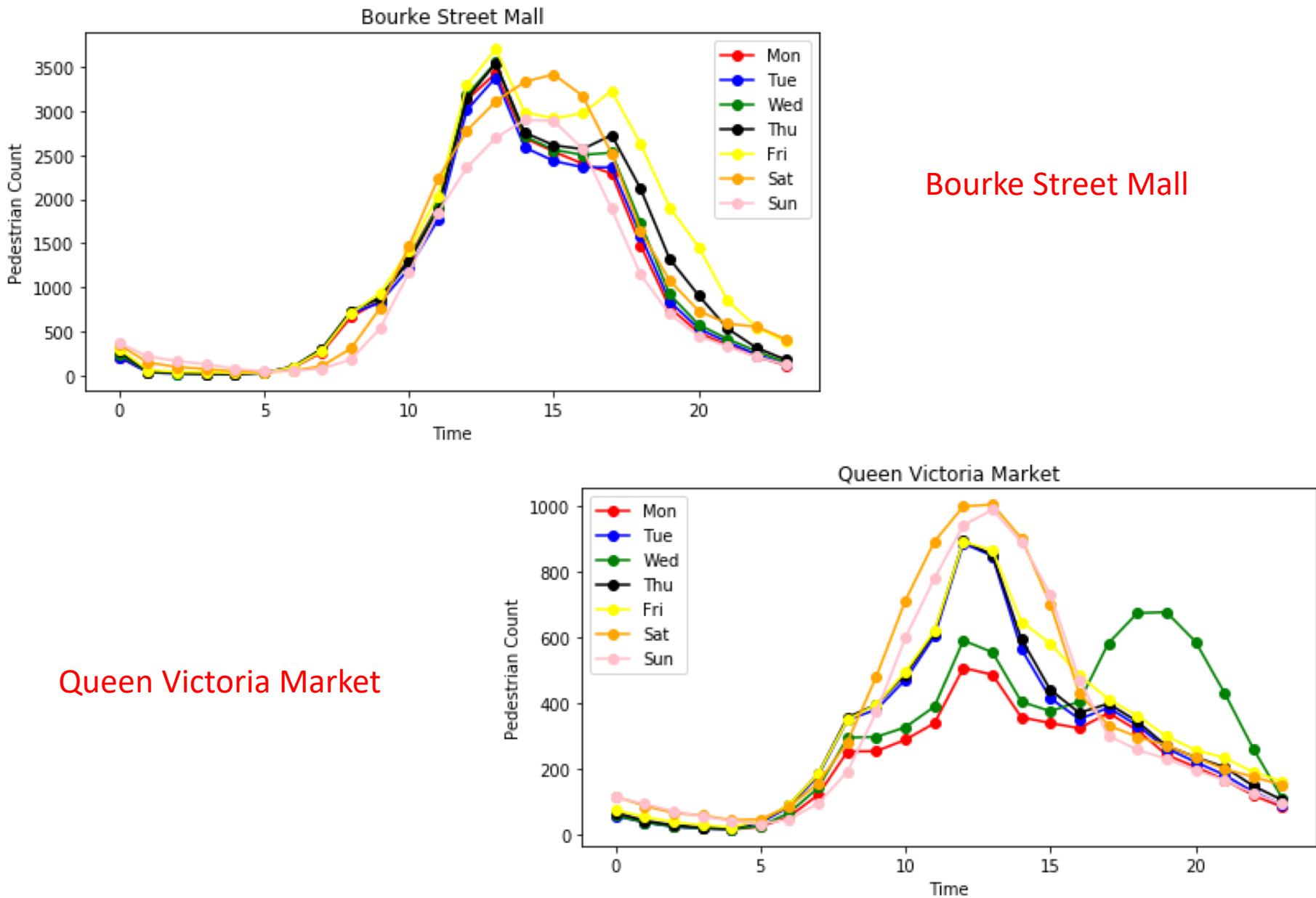
Foot Traffic at different locations in the city



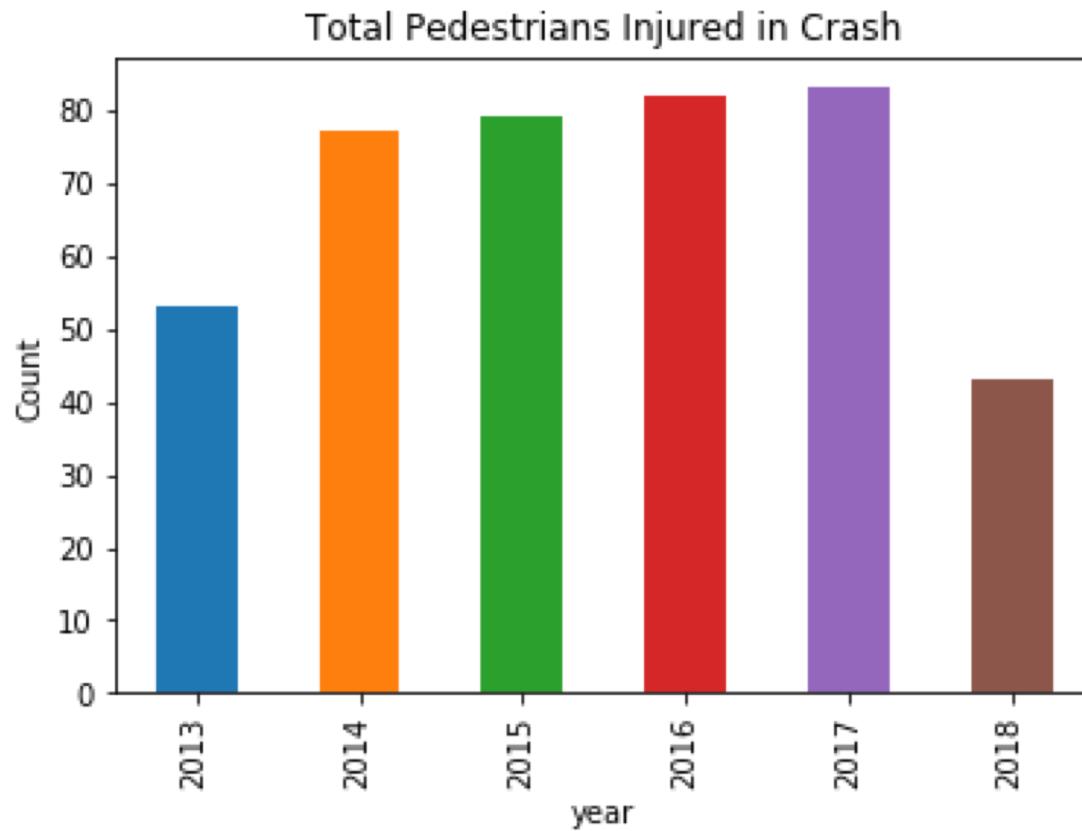
Foot Traffic at Train Stations



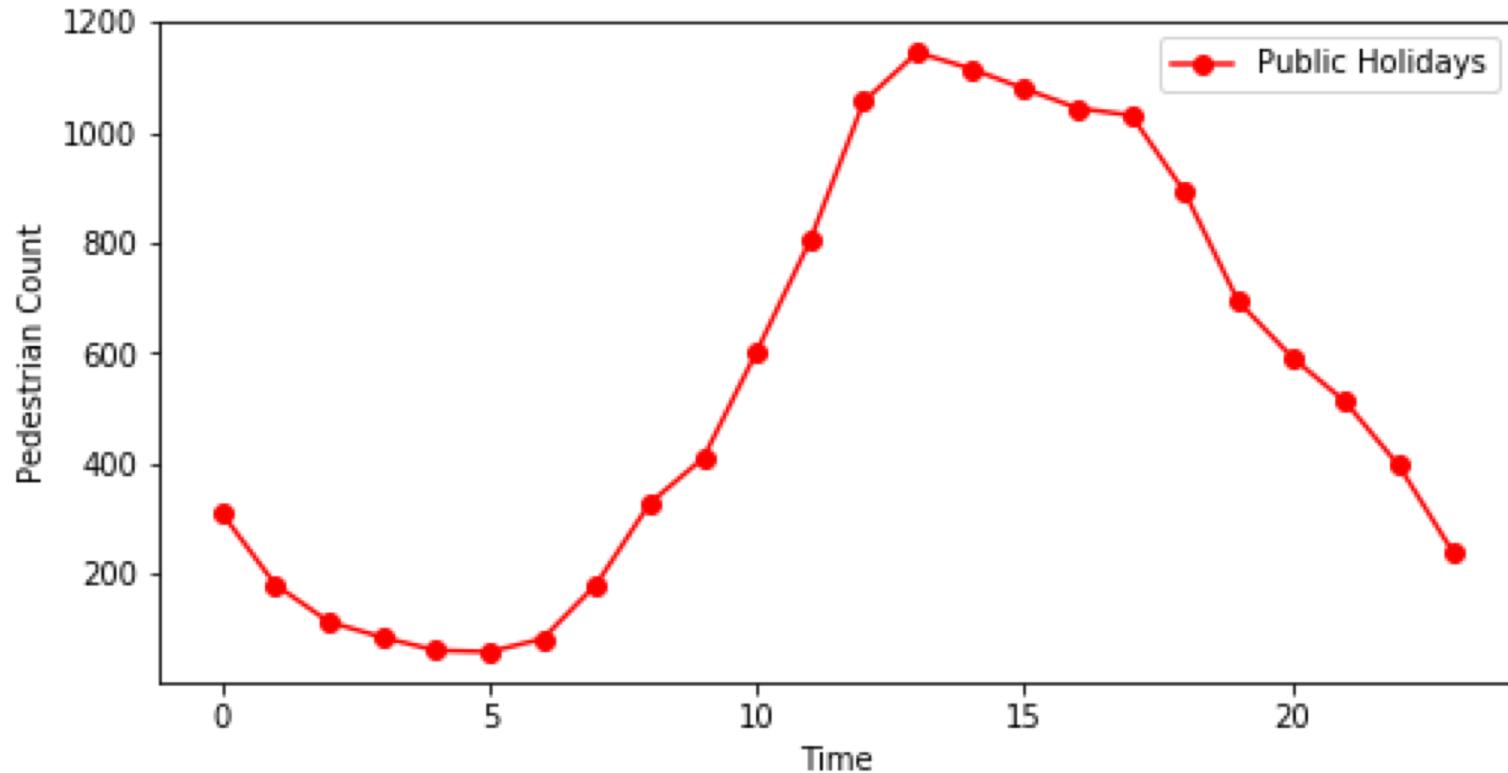
Foot Traffic at Markets



Accidents involving pedestrians



Trend on public holidays

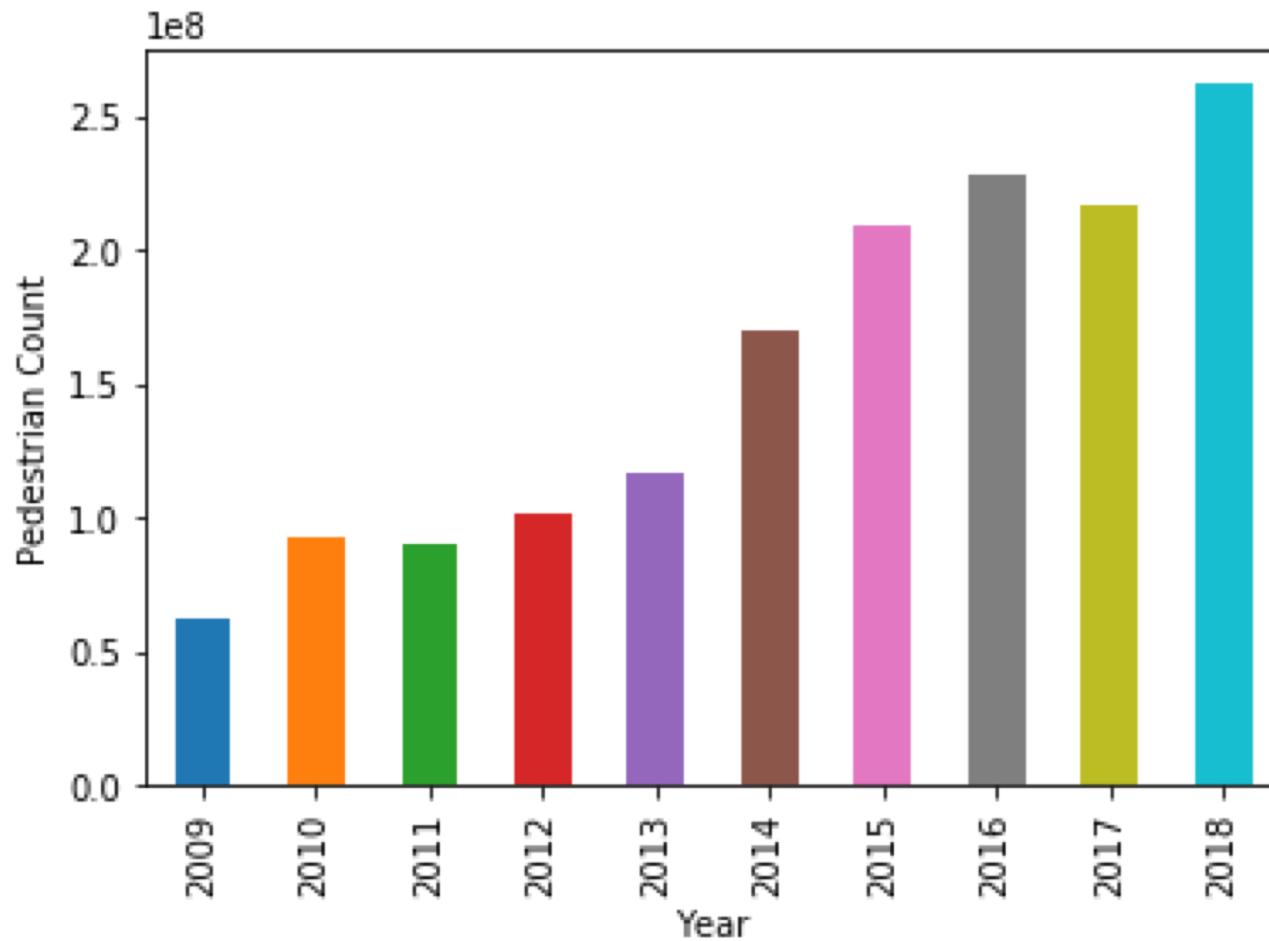


Future Directions

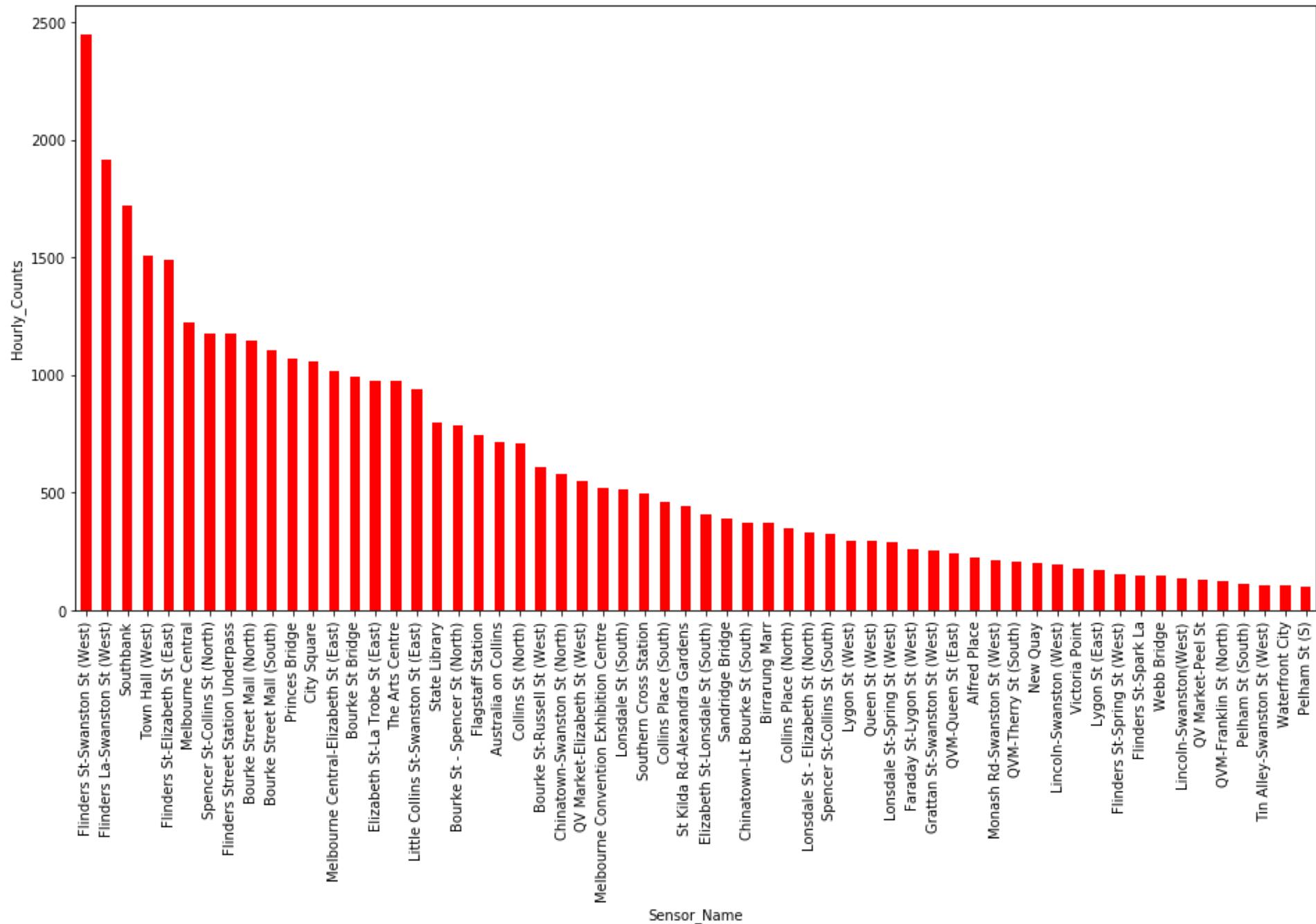
- ❖ Examine Correlations with other data
 - Weather data (Will scrape from wunderground)
 - Restaurant data (Will scrape from yelp or Zomato)
- ❖ Forecasting future predictions and comparing different models such as
 - ARIMA
 - LSTM
 - Investigate whether weekend and weekday trends will require different model
- ❖ More sophisticated analysis and investigation of data such as
 - Reason for large pedestrian count on Saturday night
 - Reason for decrease in accidents in 2018

More data analysis

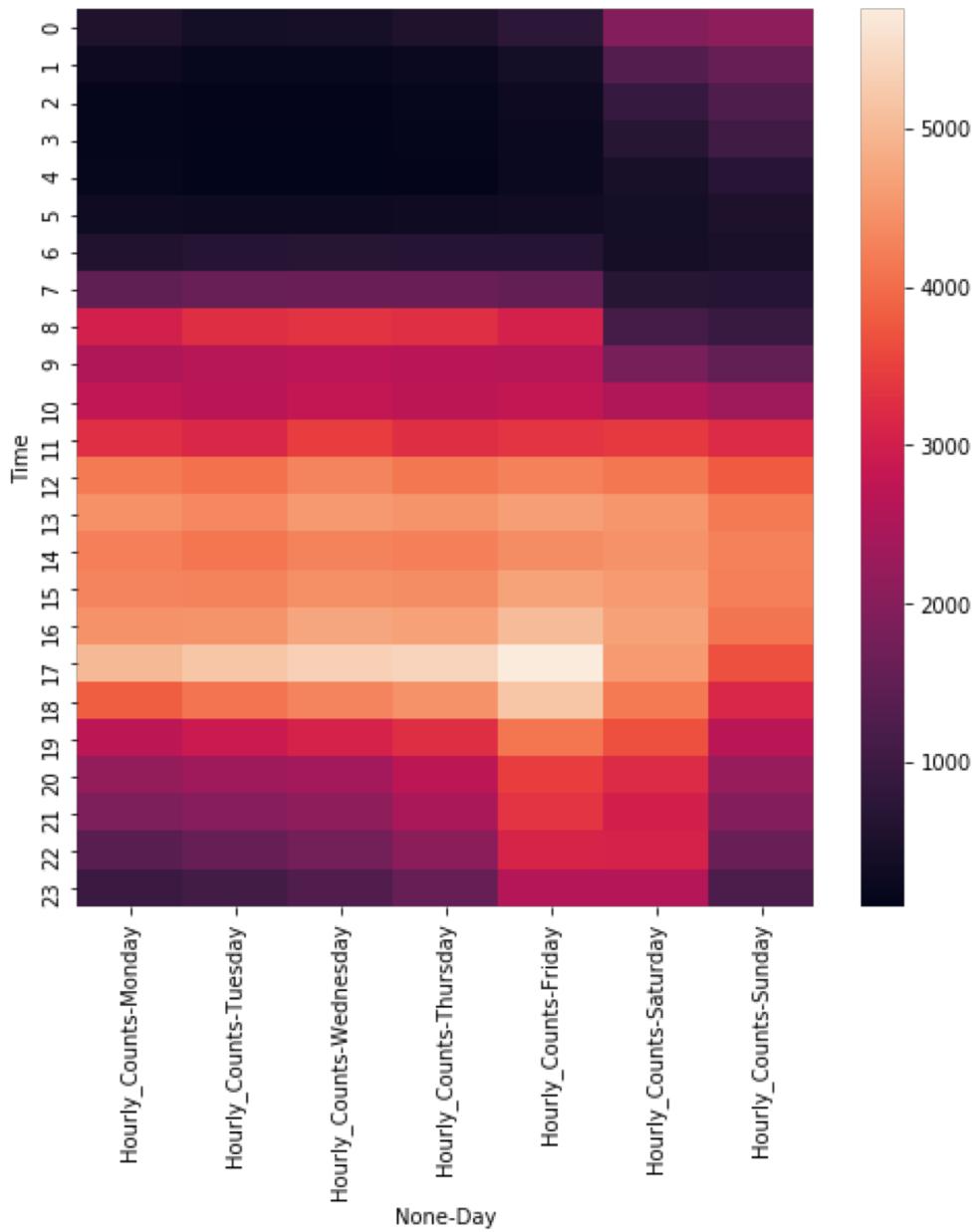
Total pedestrian count for each year



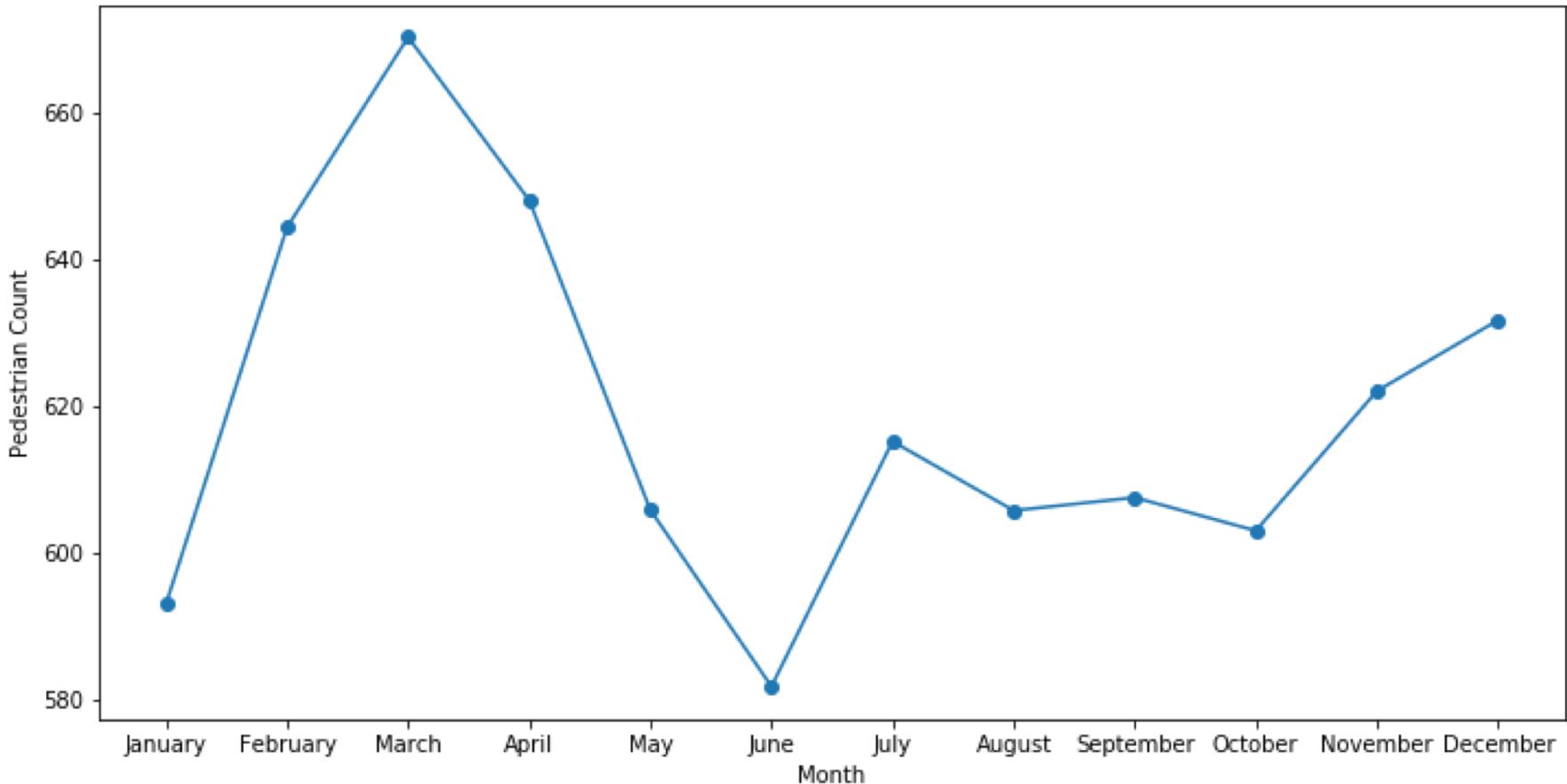
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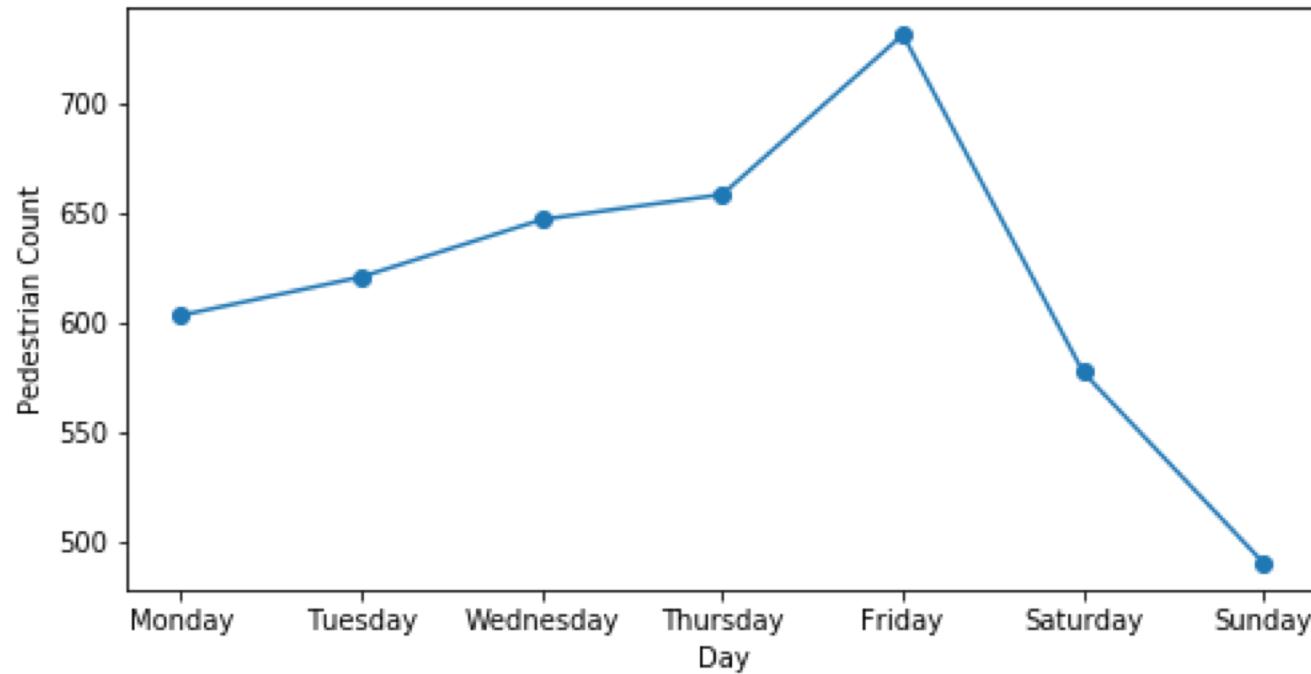


Heat Map for Flinders St-Swanston St (West) Sensor



Mean Hourly Counts grouped by Month





Mean Hourly Counts
grouped by day

Mean Hourly Counts
grouped by
weekend (1) or weekday (0)

