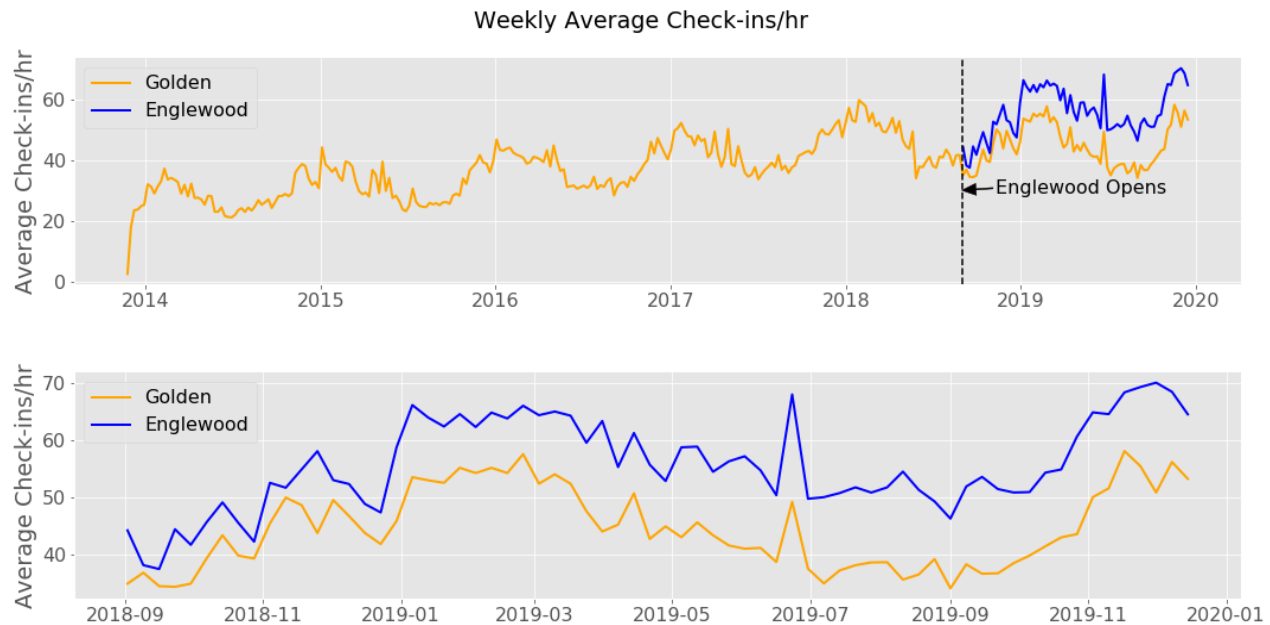


Exploring Factors that Affect Climbing Gym Demand

With the growing interest in climbing gyms, it is important to understand the factors that affect the demand on this industry. It will be useful to predict the number of check-ins for short and long time periods in order for the gym's to better serve their customers and be successful.

In order to accomplish accurate prediction, it will be important to understand what factors affect the number of check-ins. I believe that weather has a strong effect on how many people go to the gym in a given day but I would like to explore other factors as well. I partnered with El Cap and Earth Treks to analyze data from their Denver, CO gyms in order to answer these questions.

Below is a plot of the weekly average of check-ins per hour for the Golden and Englewood locations. Englewood opened about a year ago while Golden has been open since before 2014.



The data shows a strong correlation between the two gyms. This implies that factors other than random noise have a strong influence on gym demand in a given week. The next steps of the analysis are listed below:

1. Finish cleaning the data and construct a PostgreSQL database to organize the data
2. Decompose the data into level, trend, seasonality and noise. MVP
3. Compare these values to weather data to look for correlations. MVP+
4. Look for other factors that correlate with the data and explore different user groups. MVP++