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Predicting Uber Prices in New York

Introduction: In New York, Uber and Lyft have become the predominant form of private transportation. This shift not only affects New York residents, but the thousands of tourists and business travelers visiting the city daily. Poor weather, high demand, or special events can lead to 'surge pricing' for the rides, a higher additional cost along with the base fare. With this price variability, this project aims to answer a classic debate: Uber or Lyft?

Project Purpose: In this case, you will analyze whether Lyft average total fares can be used as a factor in predicting monthly Uber average total fares. To do this, you will obtain ride fare data from the NYC Taxi and Limousine Commission, and calculate the average total ride fares per month. You will compare the mean absolute error of SARIMA models that predict the monthly average uber fares with and without Lyft fares as a covariable. From the results, you will be able to determine to what extent Uber and Lyft are similar with their prices over time, which can influence how riders make decisions for choosing between the two services.

Deliverables: With this case, you will create an SARIMA model of monthly average Uber fares and a SARIMA model of monthly average Uber fares with monthly Lyft fares as a covariable. You will provide a github repo of these models along with an analysis on uber fare trends.