Flight delays report

First let’s look at descriptive analytics, in order to find patterns which would help us understand what causes arrival delays we need to decide which predictors to use in our process. Let’s take a look at how I came across getting the analysis done, first I needed to find out how the data looks so we take a look at the first five rows, whilst also dropping any null values or missing values to help us avoid any errors while completing the analysis. I looked at three variables that might have affected arrival delays which where: Departure delay, Distance and Airtime. Let’s take a look at how these variables stack up, Departure vs Arrival had a strong positive relationship which makes sense if a plane leaves late it is going to arrive late, Distance and arrival delay did not seem to have as strong of a relationship and airtime vs arrival was also a weak comparison. Due to the strong relationship that departure delay had with arrival delay I made that my focus of my prediction model.

A graph showing a line of blue dots

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Second let’s take a look at my predictive analysis, our goal was to create a linear regression model which would help us predict Arrival Delay. Using information from our descriptive analysis we are able to conclude through the visualization of the data that the strongest predictor is Departure delay like mentioned above if a flight leaves late, it will most likely arrive late. With that being said airlines should focus on maintaining a strict schedule so as to reduce the likelihood of a delay on arrival time.A screen shot of a computer

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