**Prediction For Business Addition!!**

Its always fascinating to see how we could predict things better when we have large sums of historic data. The world has advanced a lot in terms of technology, medicine, education and many other verticals with the right use of historic data.

One such vertical where it can make a huge impact is the airline industry, as the main reasons are, highly fluctuating price which depends on expected booking, actual booking, events and a lot more factors. Now that we all know some basics like the weekends are expensive and holiday season its expensive, we actually don’t know the best price we can book at any given point of the time in the year. Imagine if we could get alerts and recommendations when the price is actually low or offered the best. It does save a lot of money for the travelers and moreover it can also help regulate the demand and availability for business consistency with the airline companies. And it is not mere historic data evaluation done by us, which becomes cumbersome after a point in time with large sums of data, it is how we write algorithms for machines to process and learn large sums of data to help us achieve business objective, which simply is called machine learning.

Using regression method in machine learning, it has helped us overcome the said concern. We need to identify the data and time variables, missing values, heat map to help us create data frame, which further will help us build our model. We have also used RandomForestRegressor, LinearRegression, KNeighborsRegressor and DecisionTreeRegresssor, cross validation using randomized search CV for achieving the results.

Here we can see the final output in terms of the accuracy which is 87% in predicting the required data.

Chart

Description automatically generated

With this I would like to conclude that through systematic approach with machine learning, we can build an eco system that can get matured with time that can easily break down lot of complex business blocks and streamline business growth to its optimum potential. With this we are sure to achieve new milestones with the way technology can benefit the mankind.