



CAPSTONE PROJECT

Applied Data Science Capstone



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PARKS AND RECREATION

Introduction

Often when people think about data science, they imagine modern companies building profiles and recommendation engines using 'big data'. These people certainly aren't wrong, but the concept of using practical data to derive models which predict future demand has been around for a long time before big data. A great example of this demand planning would be aircraft companies, where it's not uncommon for the design of a new aircraft to take over 6 years. This means that they must design these aircraft for a future market and hence must be able to predict the future trend in the aircraft industry, and then design an aircraft that will have a niche in the future market. Almost all companies will have some level of demand planning, whether it is a baker predicting demand variation of the week or a trans-national corporation predicting how many delivery drivers need to be trained to meet future demand.

Therefore, as my capstone project I decided to analyse parks in London, and then build a model which could predict visitor numbers for a planned park. To do this, the foursquare API will be used to gather location data of parks in London and then combined with data on size of a park and visitor numbers. This data will then be used to train a multiple linear regression model for the expected number of visitors per annum. Finally, the predictions will be analysed to determine the accuracy of the model.