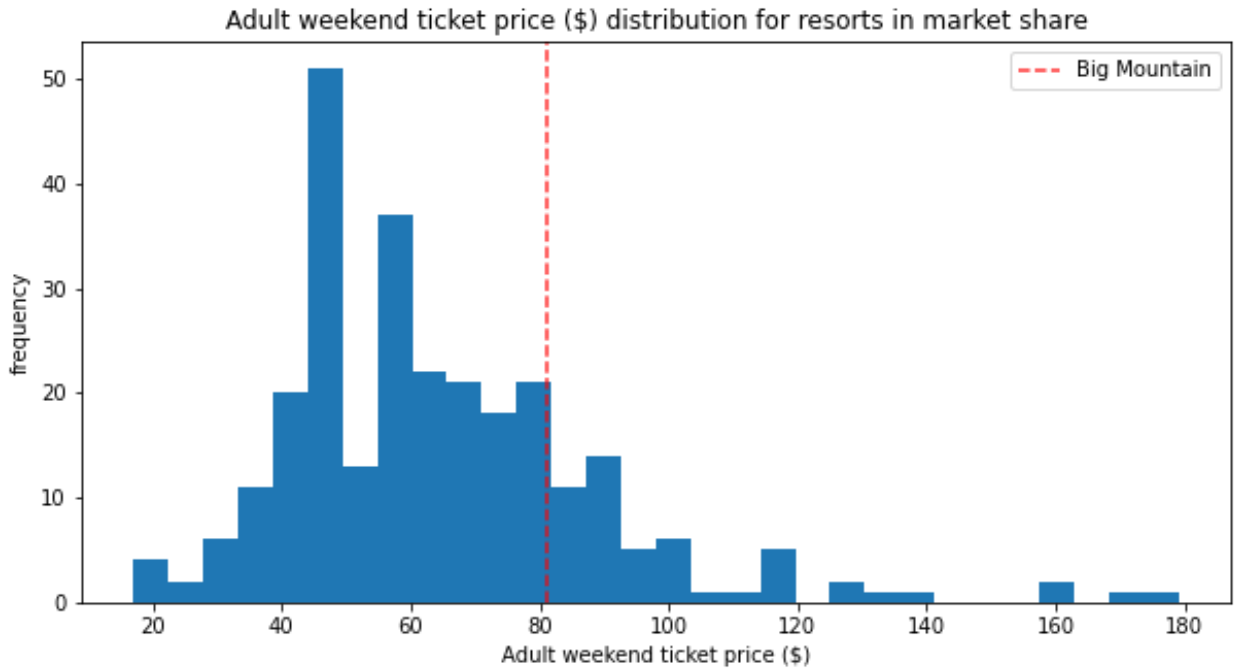
Recommendations for the Big Mountain Resort

The actual ticket price of the Big Mountain Resort for adults during the weekend was $81. From our Random Forest model, however, we found that the suggested ticket price for the adults during the weekend is $96. This result was based on assumptions that other ski resorts accurately have set their prices according to what the market (the ticket-buying public) supports. The fact that our resort seems to be charging that less that what's predicted suggests our resort might be undercharging. If we are mispricing our own tickets then it is possible that others are doing the same thing. It's possible that some resorts are overpricing and some underpricing. If resorts are pretty good at pricing strategies, it could be that our model is simply lacking some key data. Certainly, we know nothing about operating costs, for example, and they would surely help.
Here is the plot of the initial ticket price relative to the services offered compared with other ski resorts:



In many of the features and services offered we were standing at a quite good position and our initial ticket price was somewhat reasonable. We reviewed potential scenarios for either cutting costs or increasing revenue (from ticket prices). As ticket price is not determined by any set of parameters the resorts are generally free to set whatever prices they like. However, the resort operates within a market where people pay more for certain facilities, and less for others. So, we offered several changes that may lead to possible increase in total revenue such as permanently closing down some of the runs, increasing the vertical drop, requiring the installation of an additional chair lift, adding more snow making coverage, and increasing the longest run.
We calculated how these changes might affect our business assuming that average number of visitors in a season is 350,000 and, on average, visitors ski for five days. When doing these changes, we realized that closing 3-5 runs does not affect the ticket price and revenue that much, but closing more than that will eventually affect more sensibly. Adding a run, increasing the vertical drop by 150 feet, and installing an additional chair lift will increase the ticket price by $8.61 and increase the revenue by $15065471 over the

entire season. Adding 2 acres of snow making to the previous scenario increased the ticket price by $9.90 and total revenue by $17322717. Increasing the longest run by 0.2 miles and guaranteeing its snow coverage by adding 4 acres of snow making capability did not affect the prices at all, so we may drop this option. All these different scenarios show which could be applied in order to make some business changes. After this point it is up to the general managers of the ski resort on which kinds of changes, they think would benefit their business.