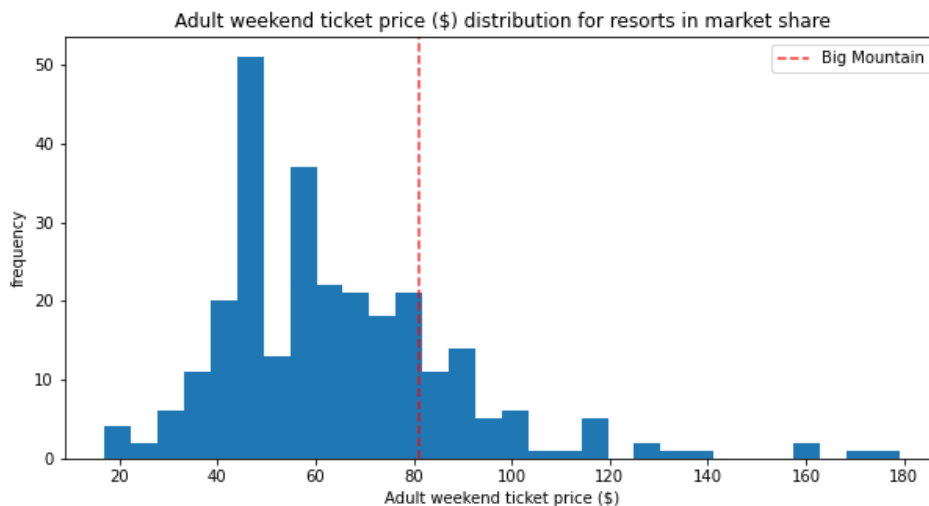


## Big Mountain Resort

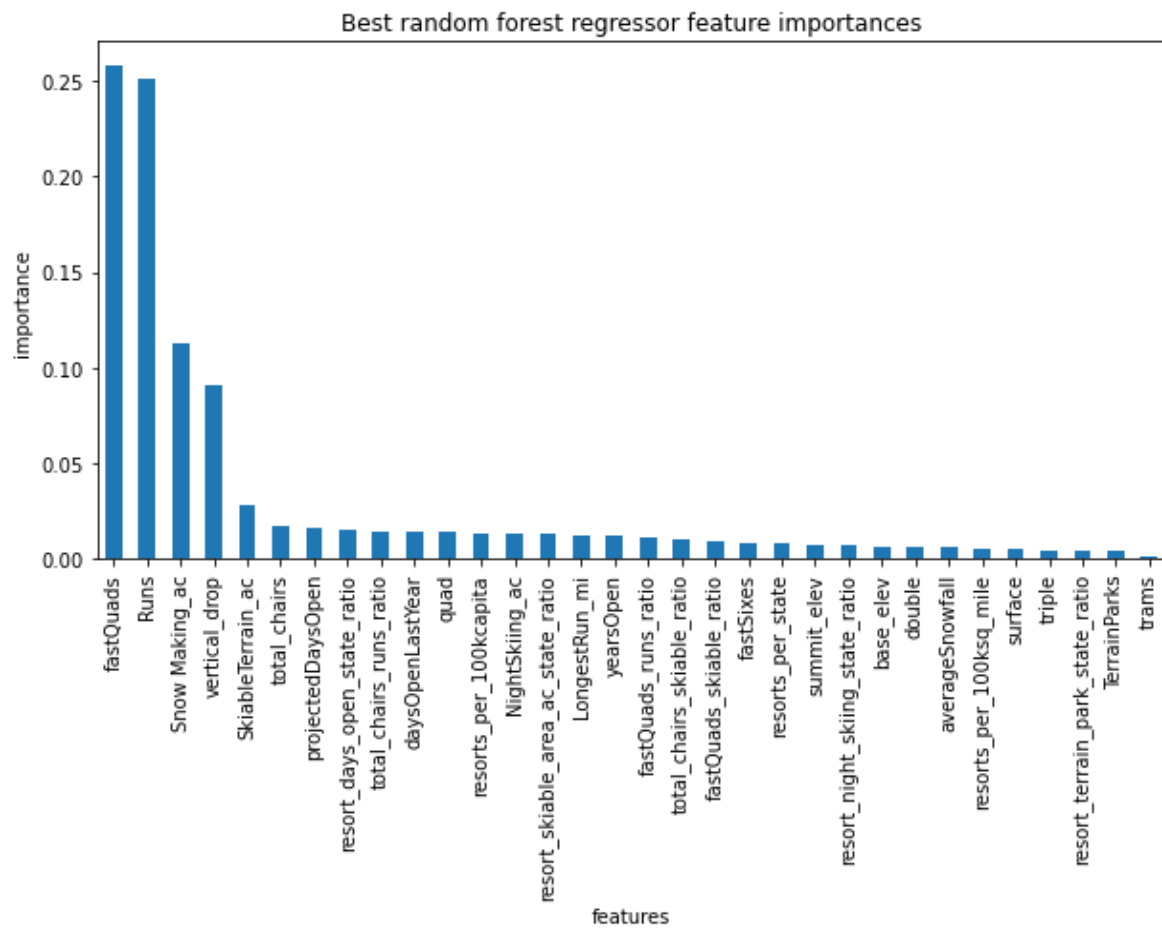
My current recommendations to Big Mountain Resort to support an increase in ticket price are as follows: add one run, increase the largest vertical drop by 150 feet, and install one additional chair lift to the resort. These recommendations are a result of reviewing data from over 300 resorts across the United States. Big Mountain Resort has already added one chair lift within the past year, so rather than rolling back on features and amenities that visitors expect and enjoy, the resort will continue their efforts to grow their services and therefore profits.

As seen below, Big Mountain is a top end priced resort in the state of Montana. To increase prices, the features added to the resort must be significant enough to justify an increase in ticket price.





Thankfully, we now have a model that is able to predict how much of an increase in price Big Mountain can reasonably expect with each addition to the resort.



Focusing on the top results from the random forest regressor model, we inputted important values into our ticket price prediction model and found that adding one run, increasing the vertical drop by 150 feet, and installing an additional chair lift has the capacity to increase weekend adult ticket price by \$1.99 each, amounting to \$3,474,638 per season. This will easily cover the maintenance costs of the additional chair lift per season.

Finally, the possibility of closing the least used runs was also tested. This clearly showed a plummet in profits, so is not recommended for Big Mountain Resort at this time.

