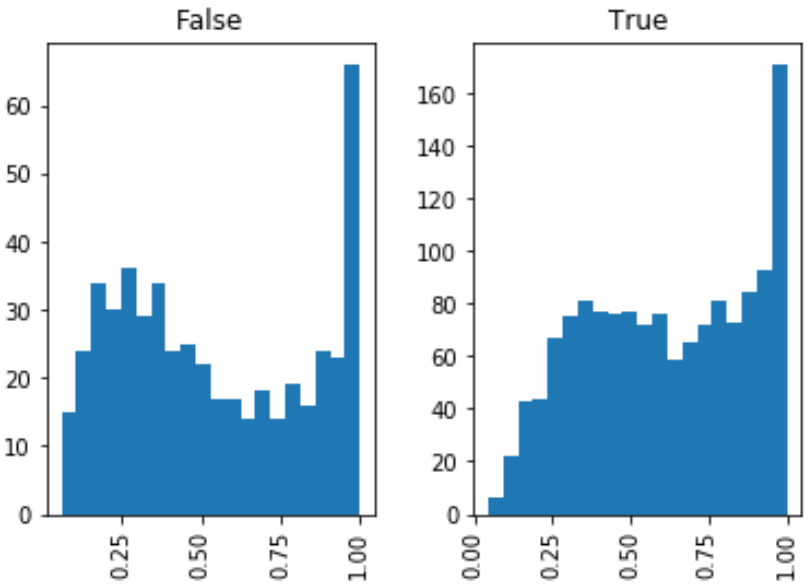
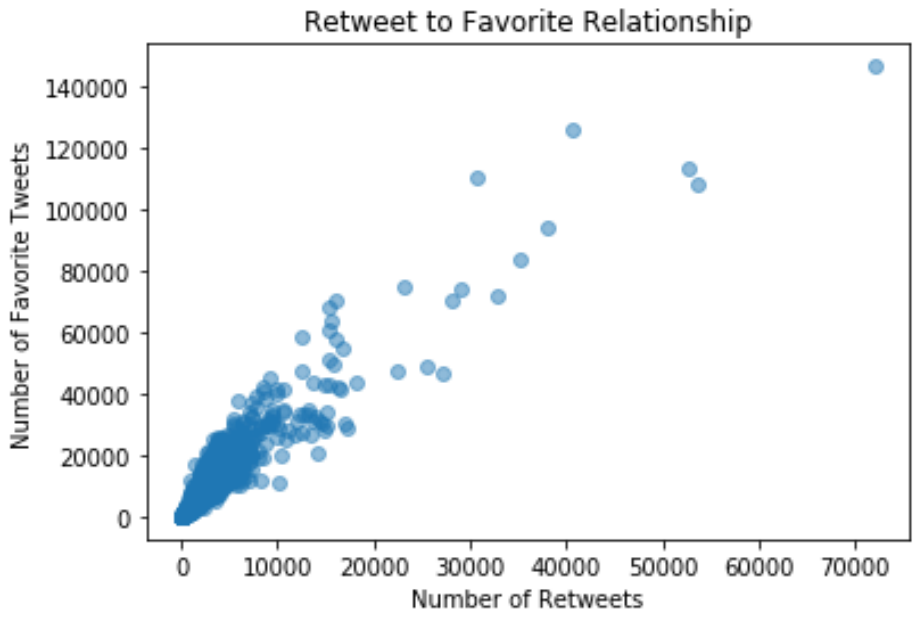
# Act Report

How do you find the cutest dog pictures on the internet? The best way is to trust in the highly valued opinion of WeRateDogs, whom you can find on Twitter. They review pictures of the cutest dogs doing the cutest things and give them a score. The highest recorded score for a single dog is 15/10, but those are rare. I took the opportunity to evaluate a prediction model that was designed to guess what breed the next featured dog would be. Here's what I found out!

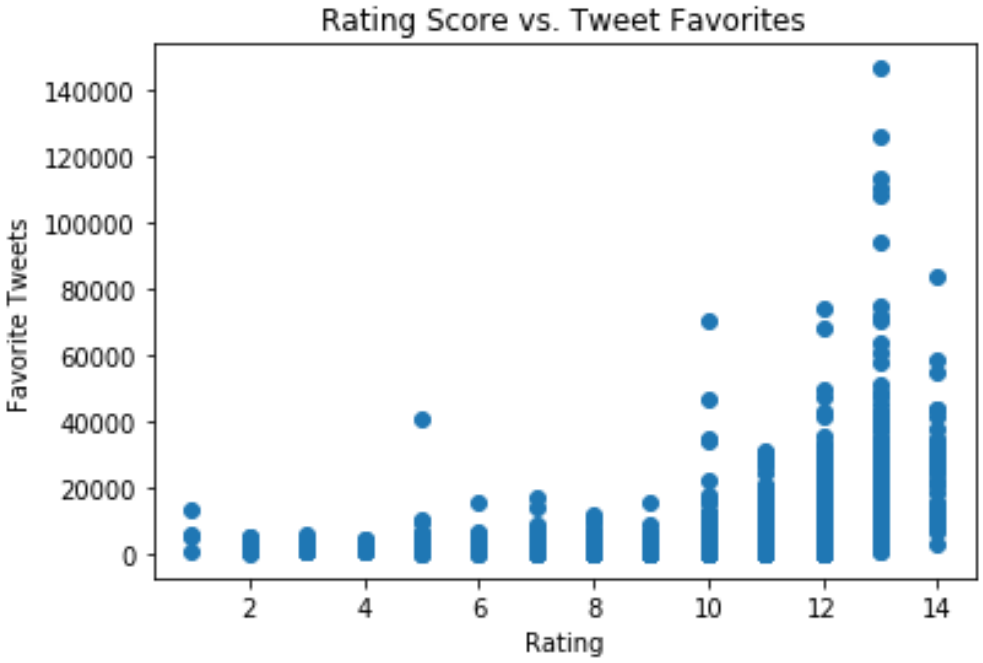
From a purely volume perspective, the prediction model predicts correctly more often than not. Looking at the shapes of the distribution of correct and incorrect predictions, the correct model is slightly skewed to the winning side. Although, a 100% confidence prediction of the model doesn't always turn out to be correct as you can see when you compare the right-most column of each histogram below, you can predict the future more often than not.



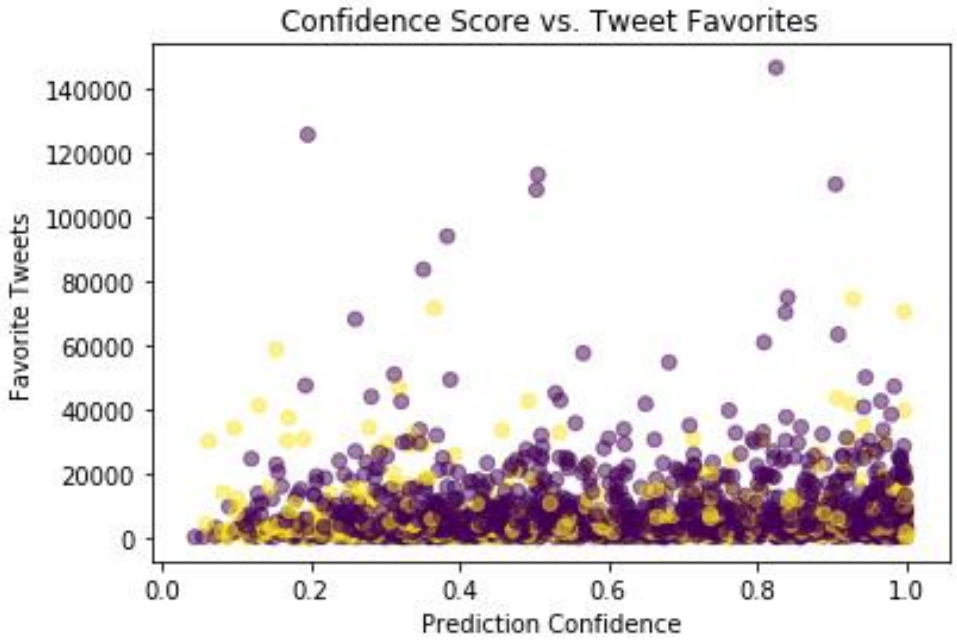

Not surprisingly, there is a strong relationship between the number of favorite tweets and the number of times a tweet is retweeted.




The next thing I investigated was seeing how well the ratings that WeRateDogs give tweets really are. Do they truly know how to judge the cutest dogs out there? Looking at the scatterplot distribution below of the rating score versus the number of times that tweet was favorited, it is skewed left. This means that the higher the rating that is given, the more times that picture is made a favorite.




So the real question is: can the neural network predict the cutest puppies as well as WeRateDogs? In a scatterplot comparison between the prediction confidence and the number of tweets that were favorited by Twitter users, the results are all over the place.




There is a mass of undecipherable data points, so I zoomed in to see if it there was a stronger correlation on a smaller scale, but alas, there was not. I think it is safe to say that WeRateDogs is the best judge of adorable dogs!