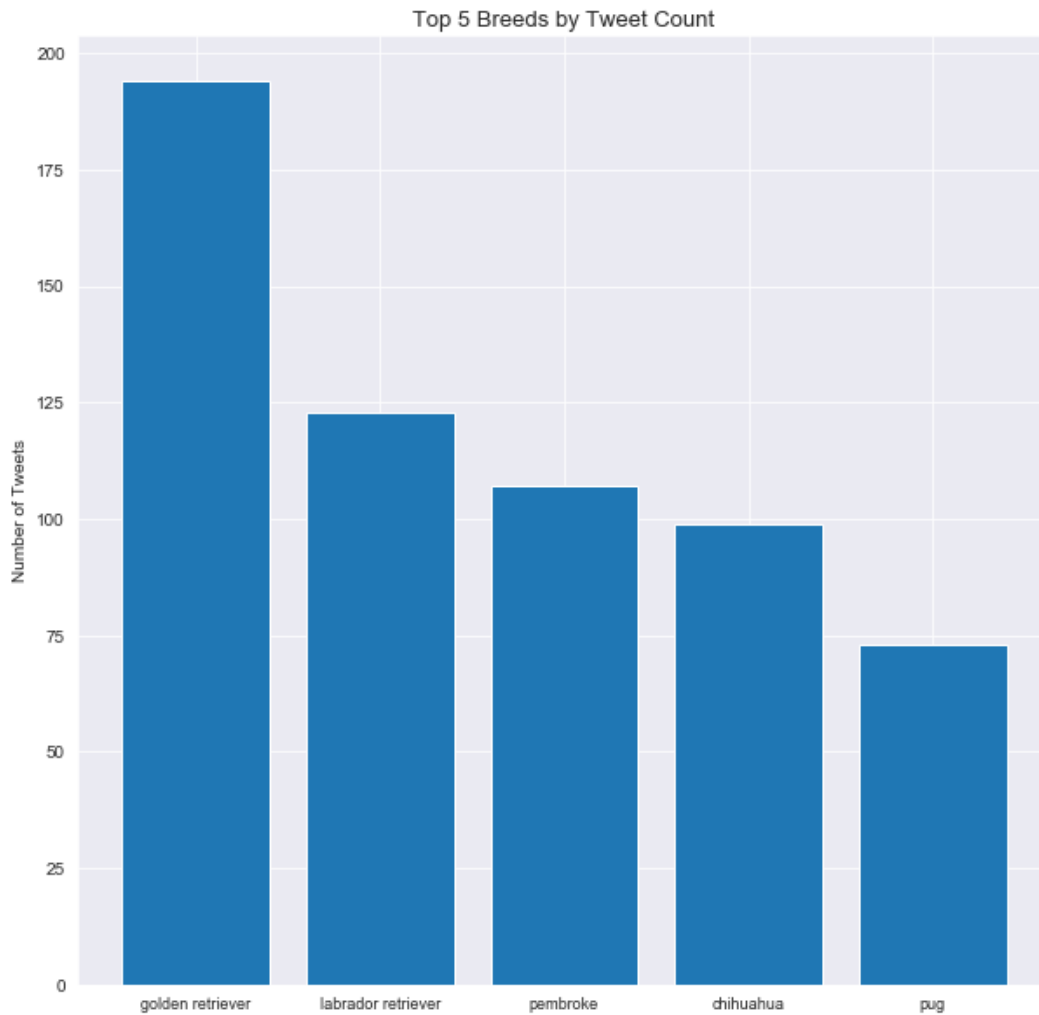


## Udacity Data Analyst Nanodegree - Project IV: Wrangle & Analyze Data - Analysis Report

After wrangling and cleaning a final dataset consisting of 2,284 tweets from the WeRateDogs Twitter account and information from a machine learning neural network that identified the breed of dog in photos in those tweets, the data was used to make a brief analysis on those tweets. The findings are as follows:

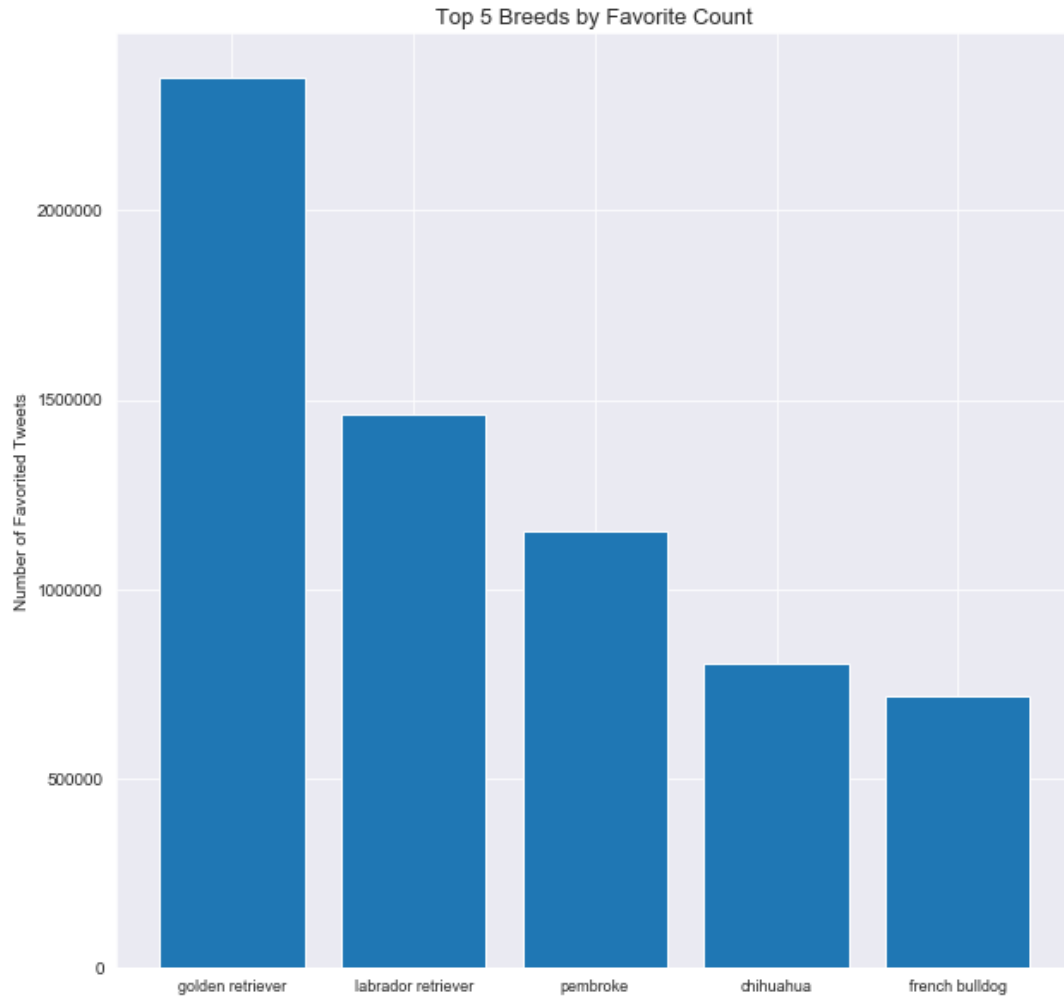
What are the top five breeds of dogs by overall tweet count?



The analysis found that the venerable Golden Retriever was the most tweeted about dog in our sample of 2,284 tweets with nearly 200 tweets featuring the breed. The Labrador Retriever, Pembroke (also known as the Corgi), Chihuahua, and Pug made up the remaining four breeds. The Labrador Retriever, Pembroke, and Chihuahua were relatively close in number of tweets, with the gap between the Labrador Retriever and Chihuahua only being in the range of ~25 tweets. The Pug closed out the top five with a tweet count of nearly 75.

While the Golden Retriever was the most tweeted about dog by WeRateDogs, I was curious to know if the breed's popularity carried over to the general public as well. To examine this relationship, I wanted to look at the top five breeds of dogs compared to both favorited tweets and retweets to see if the Golden Retriever's popularity, as well as the popularity of the top five in general, matched up with the page's viewers opinions.

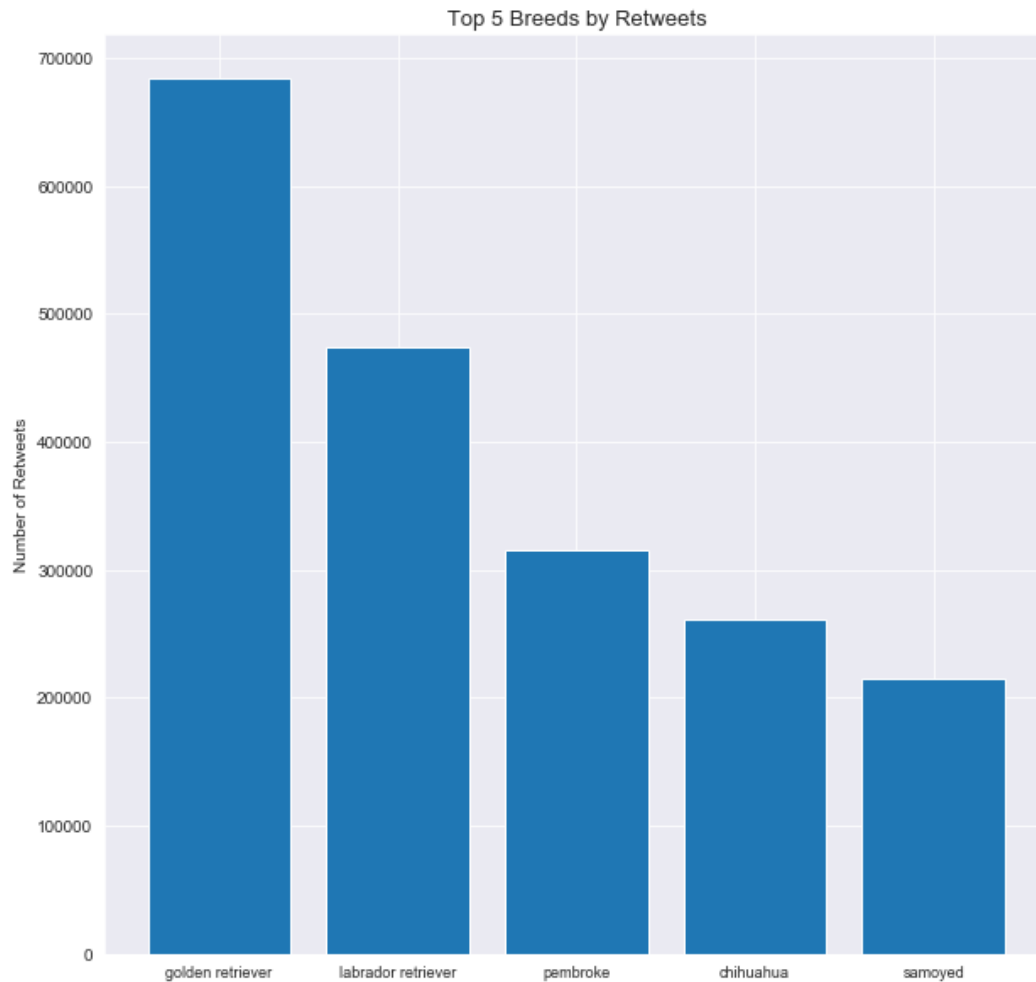
What are the top five breeds of dogs by overall favorited tweets?



Tweets featuring a Golden Retriever were far and away the most favorited tweets posted on the WeRateDogs twitter page within our sample, with well over 2-million favorites on tweets featuring a Goldie. Once again, the Labrador Retriever, Pembroke, and Chihuahua come in 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup>, respectively. However, we see the Pug has been knocked out of the 5<sup>th</sup> place standing, with the French Bulldog coming in 5<sup>th</sup> in respect to most favorited tweets.

Overall, a not entirely surprising result, but how do the breeds shape up when we view the top five breeds based on retweets?

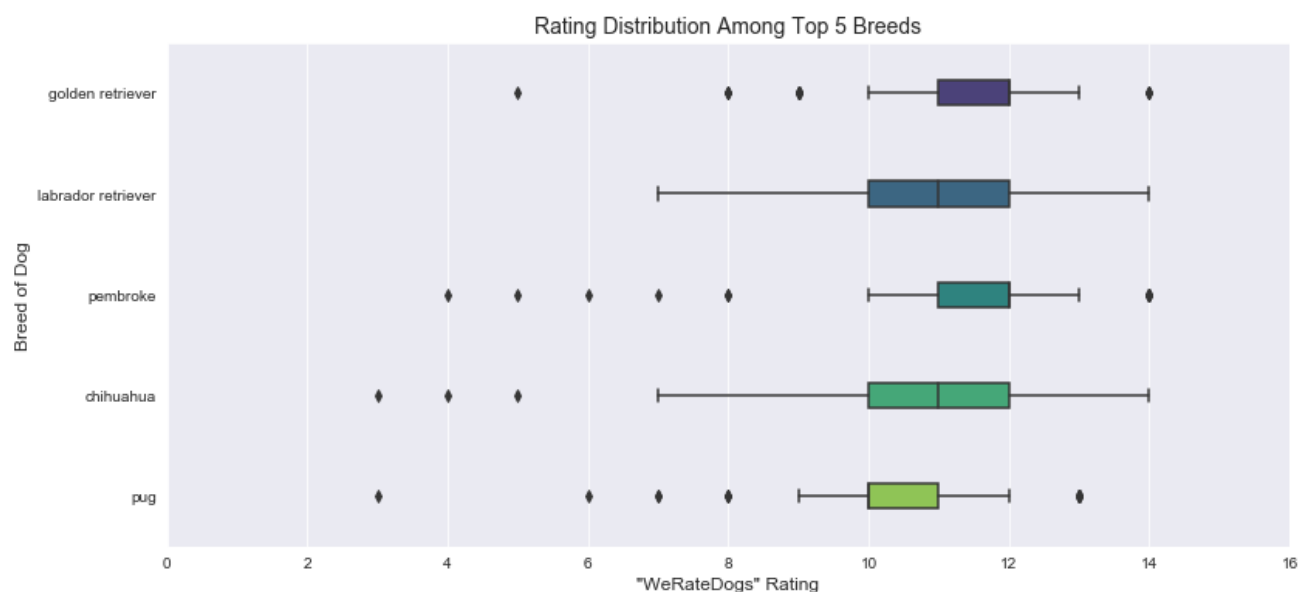
What are the top five breeds of dogs by overall retweets?



The Golden Retriever remains the top dog when we view the top five breeds based on retweets, reaching nearly 7-million retweets with a photo featuring a Golden Retriever. The Labrador Retriever comes in a distant 2<sup>nd</sup> place with nearly 5-million retweets. That's an enormous gulf of nearly 2-million retweets. The Pembroke and Chihuahua once again, round out 3<sup>rd</sup> and 4<sup>th</sup> place, respectively. But again, 5<sup>th</sup> place has changed with the Samoyed (also known as the Shoob, and my personal favorite breed) entering the Top 5.

While the Golden Retriever, Labrador Retriever, Pembroke, and Chihuahua definitely seem to be the favorite breed amongst WeRateDogs and the people who follow them, it definitely seems like there is some fierce competition for the fifth place spots, as each metric we've looked at has had a different breed in that spot.

Finally, I wanted to look at the range of ratings for the top five breeds of dogs by overall tweet count posted on the WeRateDogs Twitter account, to see if they tended to favor one breed over another in terms of ratings.



The box plot does seem to confirm that the Golden Retriever is rated higher, overall than other breeds, due to a smaller range of ratings ranging from 10 to 13. Compare that to the Chihuahua, whose ratings range from 7 to 14, and it seems the Goldie is definitely rated higher on average than other dogs, though the Pembroke shares the same general average rating range, though it should be noted the Pembroke has more outlier ratings on the lower end.

In summary, while the data shows the Golden Retriever is clearly the most popular dog on the WeRateDogs Twitter account, and with the page's followers, the data also shows something not surprising at all: that all dogs are good dogs!