

## WeRateDogs Twitter

One of the more popular Twitter accounts goes by the name of WeRatedogs and does exactly what its name implies: it shares pictures of dogs and then rates them (out of ten and always with the numerator greater than the denominator because, let's be honest, all dogs are great). We were lucky enough to get an archive of about 2,500 of their tweets for analysis. However, this dataset lacked one crucial component: favorite and retweet count. Also available was the results of an image recognition algorithm that was run on the images in the tweets. This provided the computer's best guess as to the breed of dog. We will get to this in a bit.

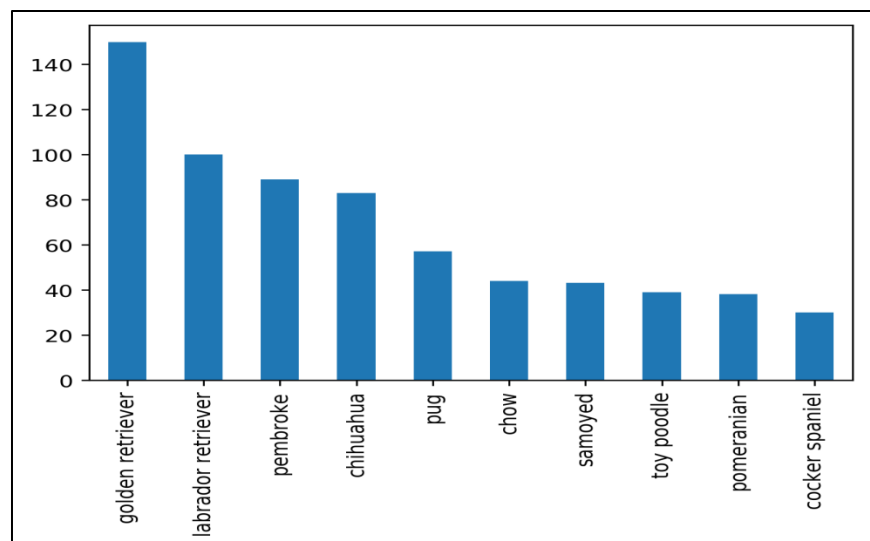
Getting those numbers required using the Twitter API, but with a few lines of code and about 30 minutes, we had the data we needed. Now we were able to analyze the tweets and this yielded a plethora of fun insights. WeRateDogs often refers to the dogs in their tweets by nicknames, like pupper or floofer. With the data we gathered and cleaned, we were able to look at mean favorite and like counts for these 'classes' of dogs.

We can see from the table on the right that the most favorited and retweeted dog type was 'puppo'. This makes a good bit of sense, as puppies are often considered the cutest. However, 'doggos' were the most common type of dog with a total of 256 occurrences that the text recognition script identified.

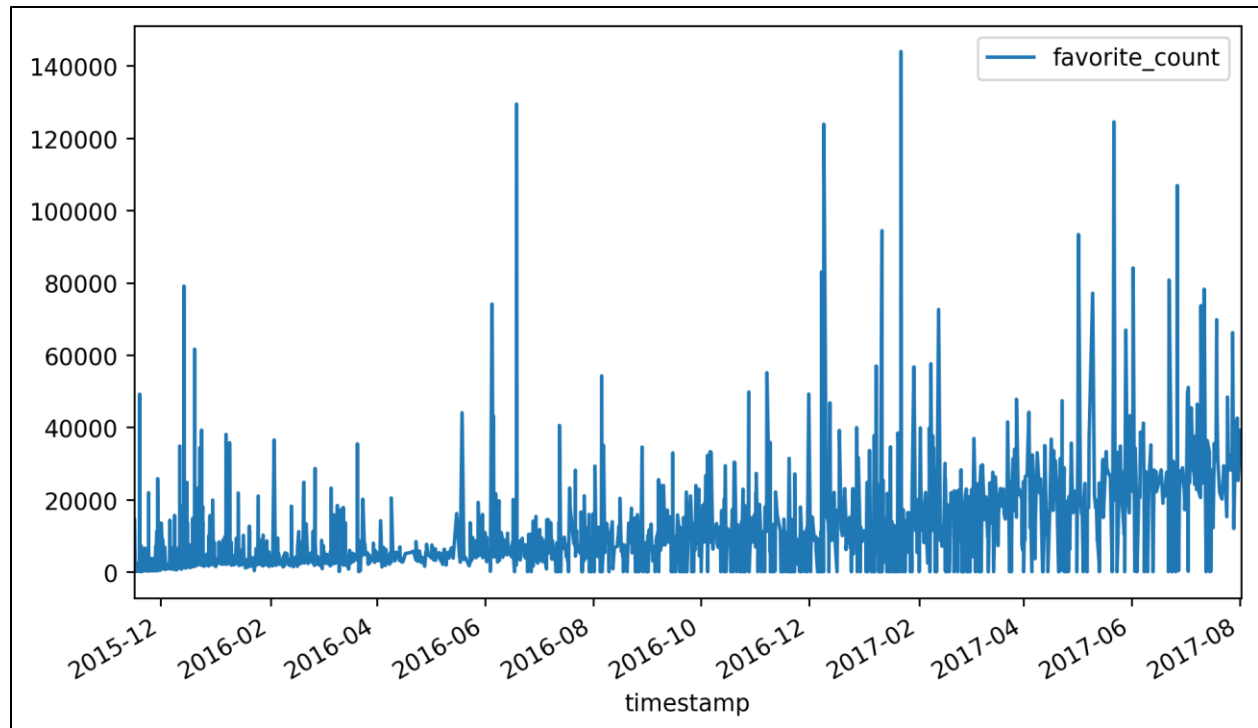
Dog Type	Mean Favorite Count	Mean Retweet Count
Doggo	15,216.2	7,174.6
Floofer	11,530.7	4,012.4
Pupper	6,743.4	2,823.0
Puppo	18,875.2	9,653.5

The breed of dog was also something interesting. The neural network used to identify the breed of dog in each picture wasn't perfect, but it certainly did an alright job. Counting the number of each dog breed was simple, and provides a fantastic visualization. As is clear in the bar chart below, the most common dog breed was golden retriever, followed by the Labrador retriever. This makes sense, as both are in the top five most popular dog breeds, according to the American Kennel Club.

Finally, we used the data to look at the favorite



count over time (it spans about 2 years). This provided some interesting results, as you can see. The counts do seem to trend upwards as time goes on, but there are clear spikes in the data, due to the somewhat volatile nature of social media. That is, certain pictures can 'snowball' in a way, gathering enough favorites and retweets to be visible to exponentially more and more people.



Overall we hope that WeRateDogs continues to share cute and fun pictures of dogs, and it was a blast to examine the statistics on their tweets.