## **WERATEDOGS ON TWITTER -**

## INTERESTING ANALYSES FROM THEIR TWEETS

WeRateDogs is a twitter account famous for rating dogs with humorous comments about them. People everywhere send them pictures about dogs via direct message. The account rates and posts these lovely creatures for followers who can freely express their opinions through retweet, like or comment. Udacity, the famous educational organization, came across the page and decided to have a learning project for students to draw interesting analyses from dog's tweets posted daily. Thanks to WeRateDogs for their help! They archived an old data from 2015 to 2017 and sent to Udacity. Udacity, on the other hand, added to the data by running every tweet's image on a neural network to get its best predictions, and saved the results to their servers. As a lucky student studying currently in Udacity, I was assigned this project to draw interesting results. Let us get to the analyses I reached while working on the project.

For the neural network results, the classifier gave true results, which are purely dog images, and false results which are another animal, tool, etc. The percentage accuracy of predicted images to original image passed differ from one to another. For accuracy, I took a sample of true predictions with the most accurate classification to give a general measure about the health of classifier. The results, as shown in Fig 1., show different accuracy measures with probability of having high and low accuracy interpreted from accuracy percentages that each prediction has. It is a good measure that shows neural network needs a revisit and additional enhancements to increase probability of better accuracy in the future.

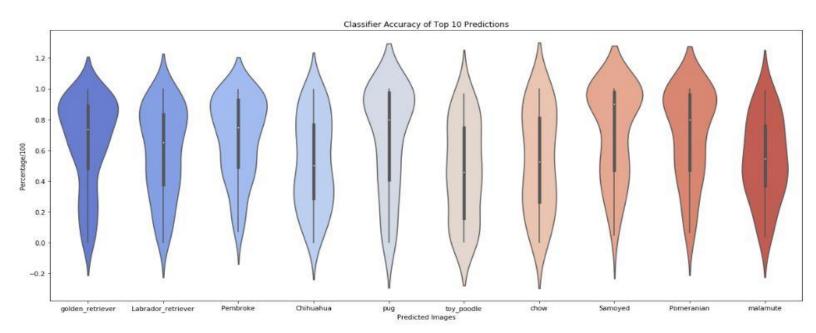


Fig 1.

Going deep to what is happening on the Twitter page, it is interesting to see how followers interact with everyday tweets, what photos interest them to DM more, what are ratings we mostly view for dogs, also any unexpected ratings.

Fig 2. shows interactions to tweets over years 2015-2017. The trend as any page goes up and down. This is normal, since it differs how followers are active on their accounts, their perspective of the dogs in posts, and many other reasons. An interesting thing to notice is followers prefer to show cute dogs their love through pressing the like button more than retweeting the tweets.

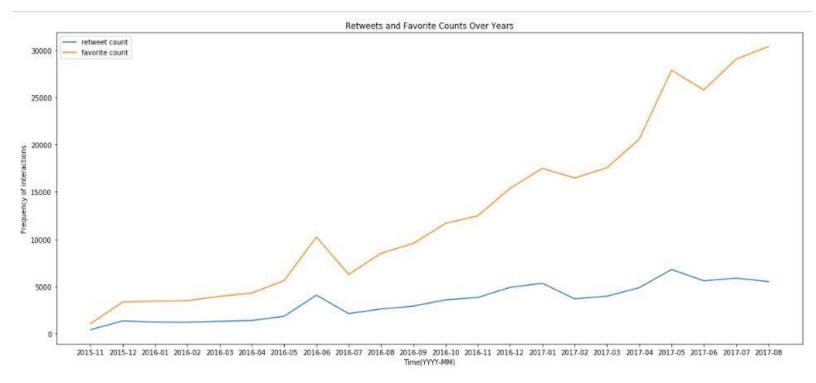


Fig 2.

How about some characteristics of dogs people love to DM more? By taking a sample of accurate clear pictures who got the most accurate predictions on the classifier. We deduce people are fond of their dogs in the pupper stage and doggo comes next. Dogs are cute in all their stages though. Enough they are human's best and honest friend. But as shown in Fig 3, The is the trend of dog stages.

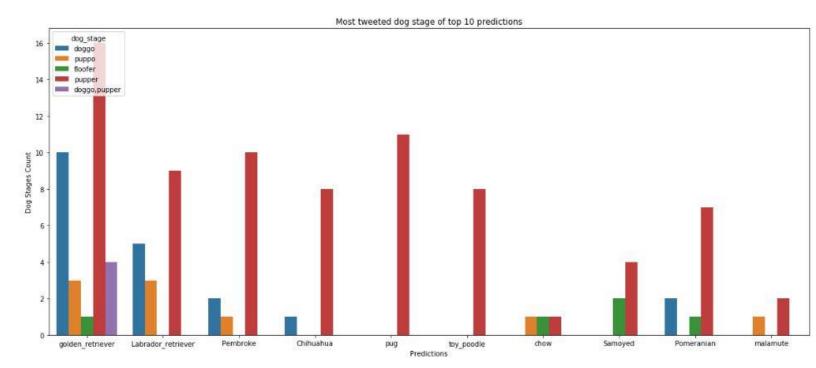


Fig 3.

Dog stages are not the only thing that is posted with dog's photo; There are ratings too that the account gives to the pictures based on their measures. All ratings of dogs mostly are of denominator 10, but numerators vary and has no limits. Dogs may get high ratings or low depending on the Twitter's page perspective. The page also considers their ratings style is what make them unique. Fig 4. Shows the range of the ratings from sample of dogs in duration 2015-2017. As shown, dogs get ratings in general from 7 to 14. Any rating below 10 is considered low and any rating above 10 is considered high. It seems in most cases we a normal distribution of both ratings.

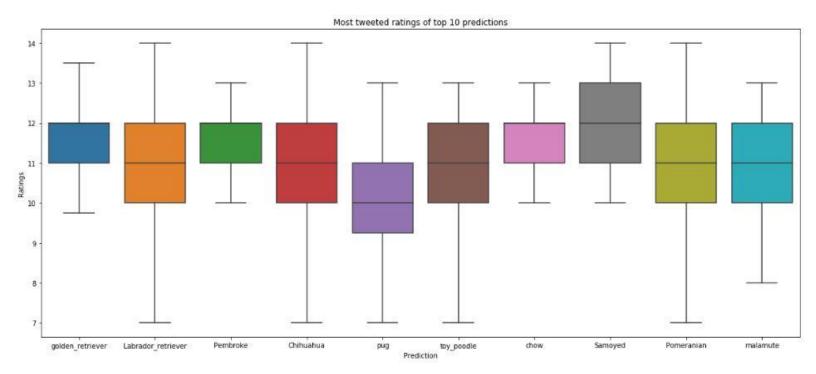


Fig 4.

Since ratings has no limits, dogs can get any infinite numerator numbers of 10. In the next figure (Fig 5.), the pomeranian prediction has some of its images getting more than 70/10. Also, we have one of cute dogs given 1776/10 (Fig 6.).

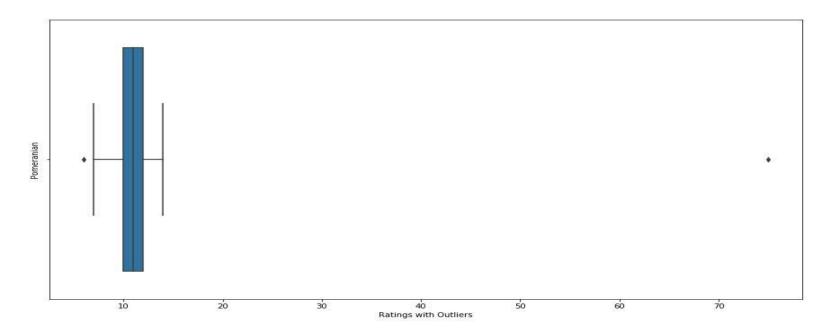


Fig 5.



Fig 6.

These are some measures I found interesting. I hope you as a reader find it interesting too.