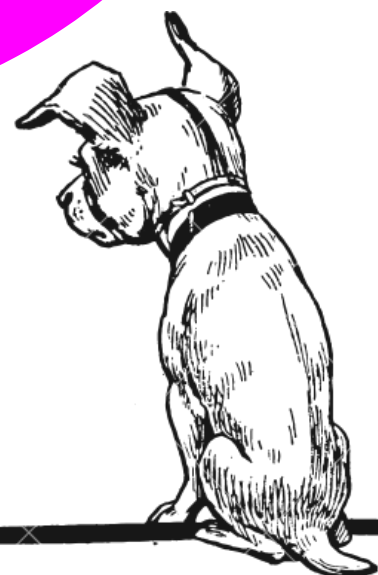




FUN REPORT ABOUT DOGS

WE RATE DOGS

2019





MAN'S BEST FRIEND

Dogs have been man's best friend and trusted companions as far back as 14,000 and 6400 years ago.

Part of the numerous reasons we love dogs are they are very loyal animals and have been known to provide humans with 'awww' inspiring pictures and videos that tug at our heart muscles.

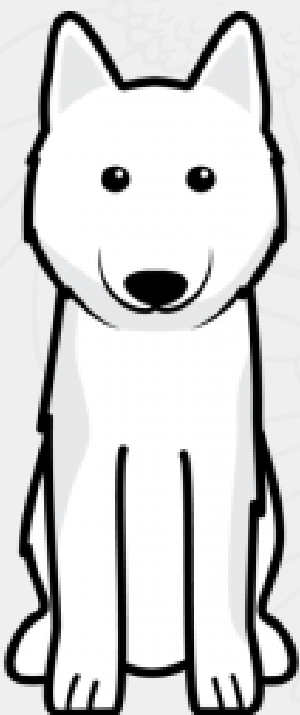
This love inspired an idea called "We Rate Dogs" where humans post pictures of their trusty canines on Twitter, along with a brief description and a rating.

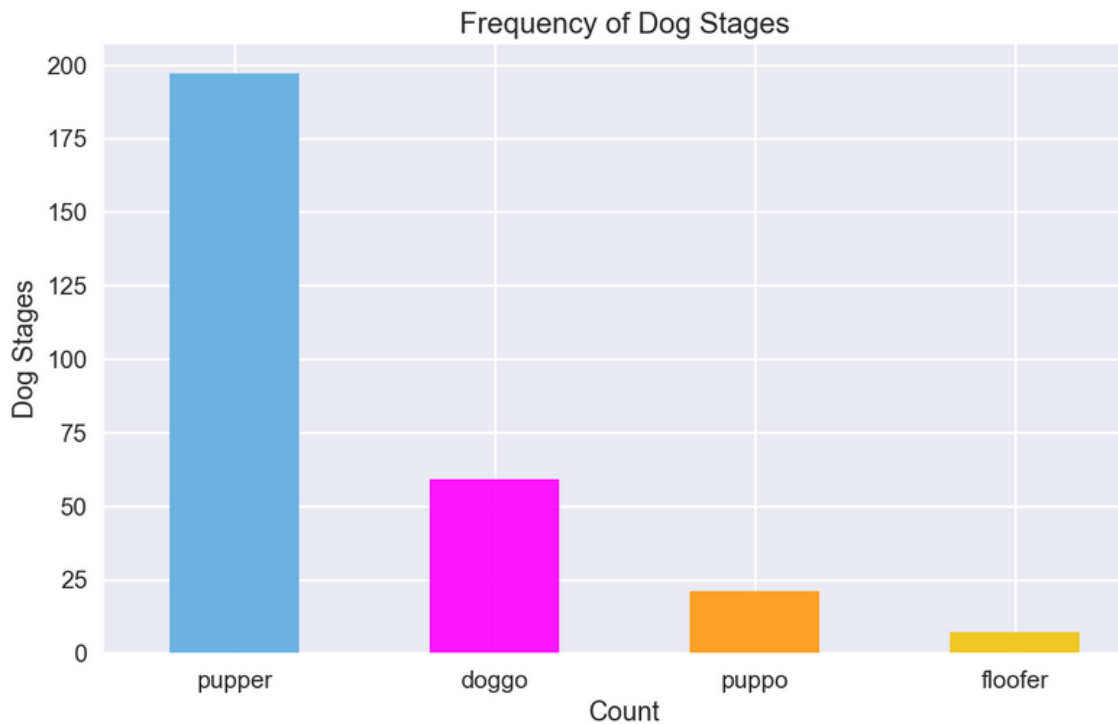
We took the pains of gathering data of those dogs from 3 different sources; WeRateDog's Twitter archived data, additional data gotten using Twitter's API and tweet image predictions data. We then wrangled the collated data and then analyzed it.

In order to get interesting insight from our data we asked the right questions. In order to answer those questions we had to perform diverse analysis on our data. The result of that analysis makes for an interesting report.

Some of the questions are;

- Which dog stage & dog type occurs most frequently?
- Which dog stage & dog type is the most highly rated?
- How do the dog stages & dog types differ with retweets & favourites?
- How does the retweet count vary with the favourite count over time?
- How efficient was the neural network?





Which dog stage & dog type occurs most frequently? WHY?

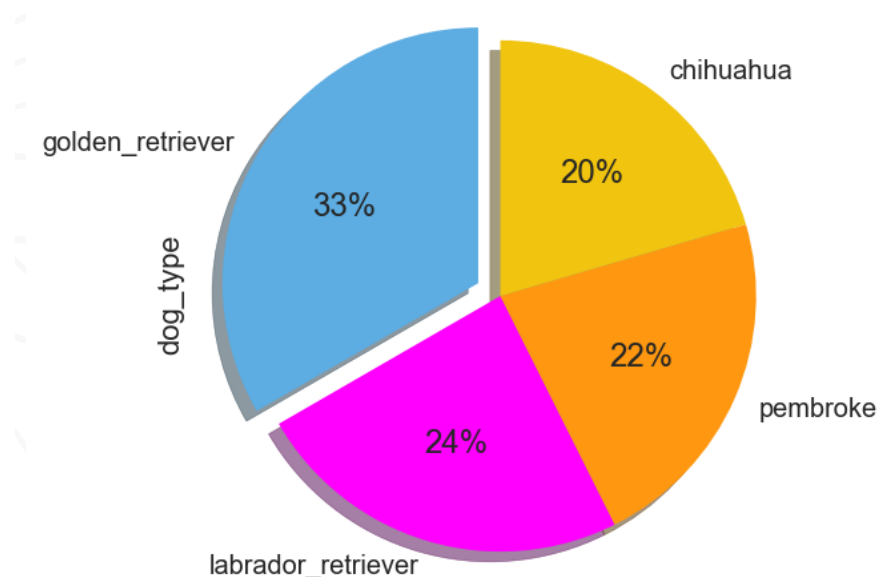
As we can see from the chart above, **puppers** are the most represented dog stage in our data. My guess is small doggos a.k.a puppers are very cute, cuter than all other dog stages, therefore their owners are more inclined, willing in fact, to participate in WeRateDogs by sharing cute pictures of their precious puppers.

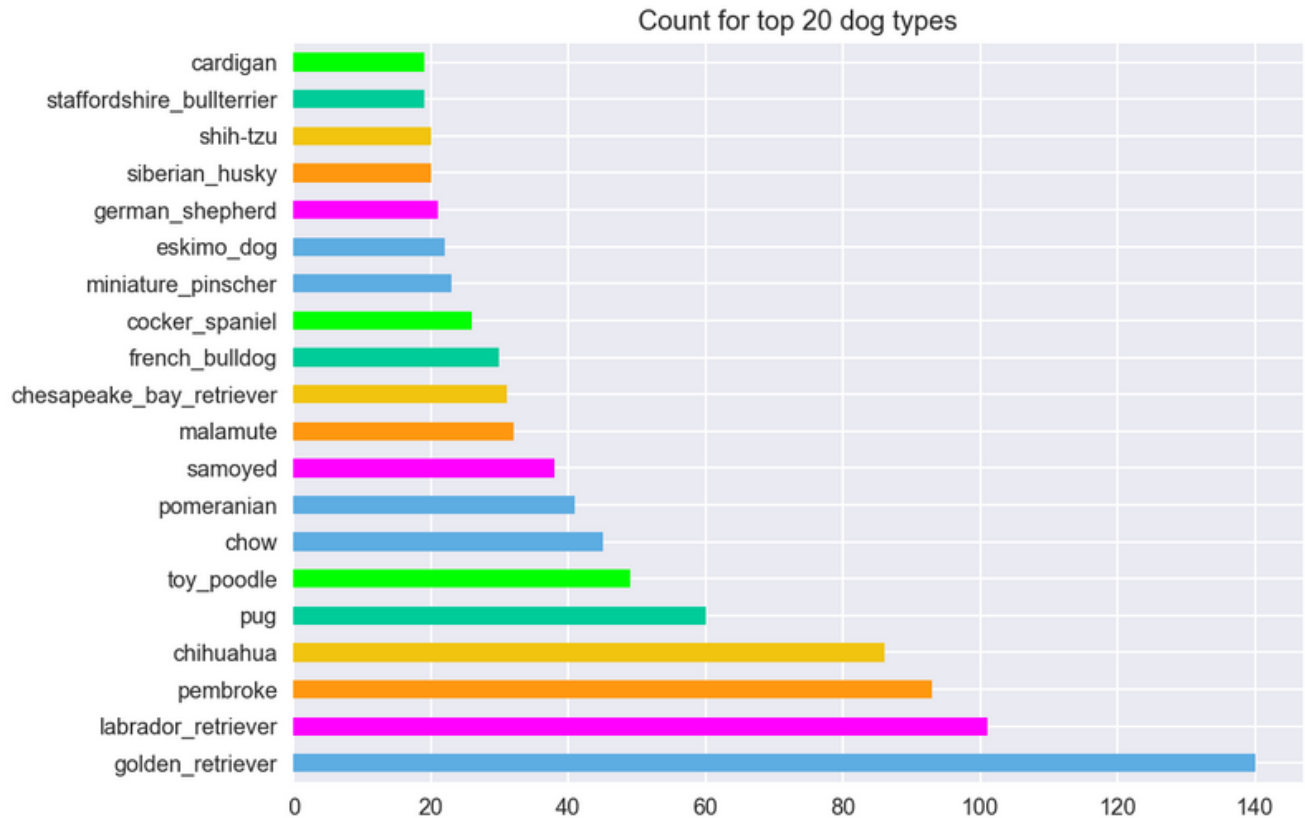
That's my take, what do you guys think?

O.K! what about dog type?

Our data shows that **Golden Retriever** is the most common dog type sent in to be rated, and from the chart on our left, out of the **top 4** dog types in our data, the Golden Retriever are larger in number by **33%**.

See the chart below for the **top 20** dog types in our data.





what is the most Common Dog name?

The most common dog name in our dataset is.....

drumroll please...

Charlie!

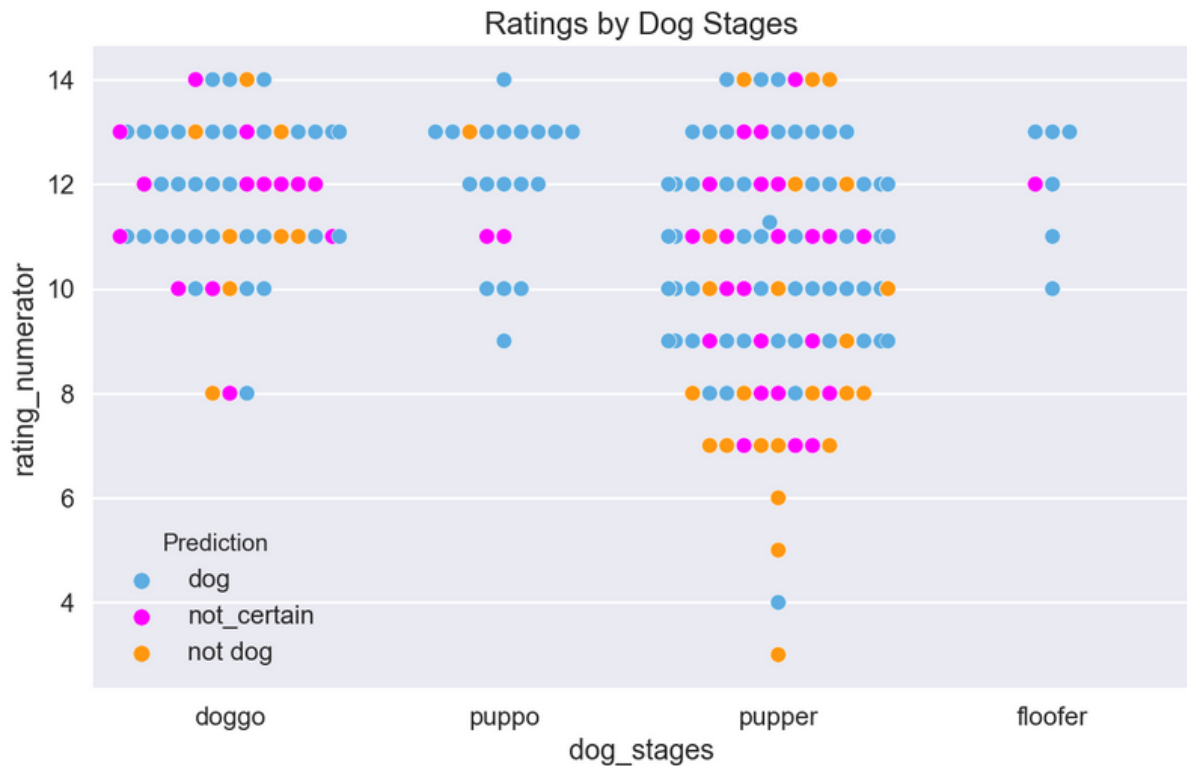
No idea why that's the most common dog name in our dataset, but on the left is a picture of one of the dogs named Charlie.

The top 10 Dog names and the count in our dataset is listed below:

- Charlie 11
- Cooper 10
- Oliver 10
- Lucy 10
- Penny 8
- Sadie 8
- Winston 8
- Tucker 8
- Toby 7
- Daisy 7



**A DOG NAMED
CHARLIE !!!**



Which dog stage and dog type is the most highly rated?

To appreciate this part of the analysis, two important values to note;

Overall Average Rating is : 10.761, while

Standard Deviation of Rating is : 1.836

Above is a tree chart that shows the rating of each dog, segmented by dog stages. Also the different colours highlights what group Neural net classified the image sent in as.

On average Pupper is the lowest rated dog stage!

Hmm.. an explanation could be that that dog stage has many entries that are more spread out i.e a high standard deviation. Therefore even if there are pupper values that are rated highly, the other values in the category brings it's average value down.

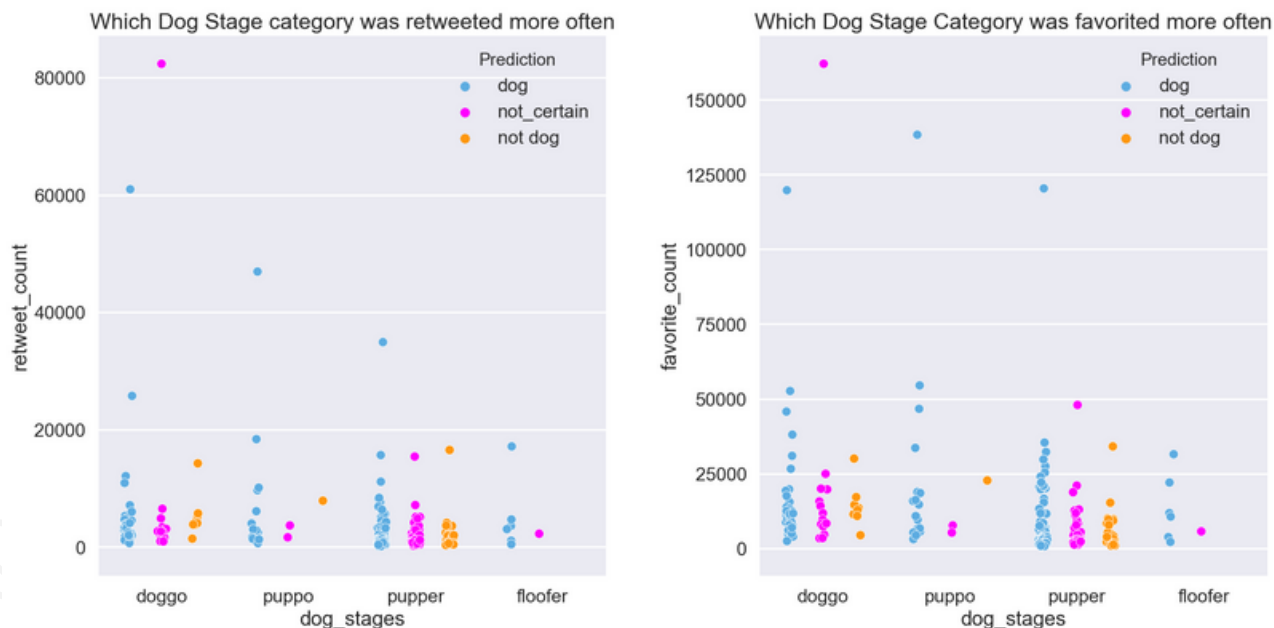
As for the dog type, from our analysis, it turns out that the top 3 dog types with the highest rating are;

- **Bouvier des flandres** 13.00
- **saluki** 12.50
- **Irish Setter** 12.33
- **Briard** 12.33

While some of the dog types with 5.0 rating are;

- **Australian Terrier** 5.0
- **Boston Bull** 5.0
- **Miniature Pinscher** 5.0
- **Japanese Spaniel** 5.0





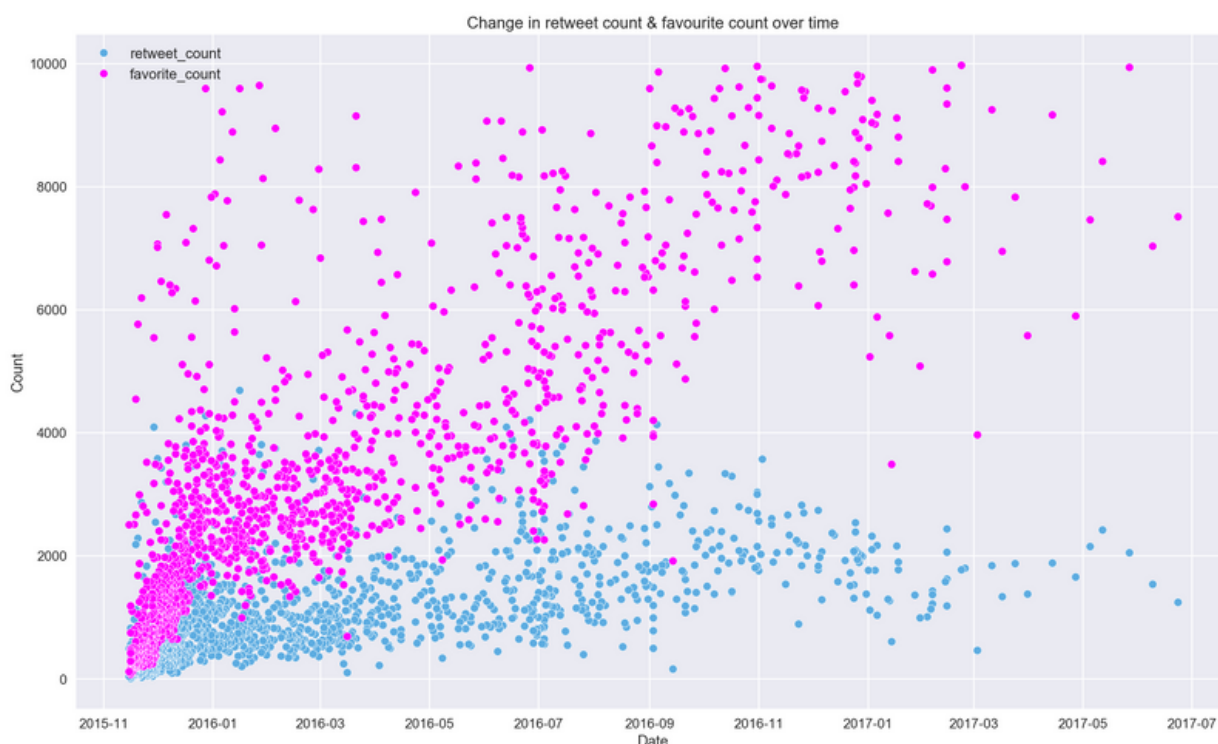
The visualization above helps to answers the question of

How the different dog stage and dog type differ with retweets and favourites?

We see that there are a couple of outliers & that a lot of more love was shown to both doggos & puppers.

However, this doesn't present the complete picture, ironic right?, because when we sum the retweet & favorite counts for the dog stages we can summarily see that considering puppers had a lot more entries, it seems doggos did quite well. "doggo" had **363,041.0** retweets in total and **1,051,215.0** favorites, while "pupper" had **413047.0** retweets and **1,302,509.0** favorites.

Not bad, below shows how the retweets and favorites faired over time.





CONCLUSION

Lastly, the neural net used in predicting the dog types from the images sent in by the dog owners did fairly well, but there were still some misses.

There was an instance where it couldn't detect an image of a dog in a school bus but it detected the bus correctly, conversely, it accurately predicted an image as being a dog even though the dog had something over its head.

To round up, I hope you had as much fun rating dogs as I did, and remember, a bit of dog mischief doesn't make the dog bad, and every dog is beautiful no matter what score WeRateDogs gives it.

Lots of love till next time.

Tony

Anthony Odiba

