

We Rate Dogs Analysis

Udacity Nanodegree Project 2

Version: 0.1

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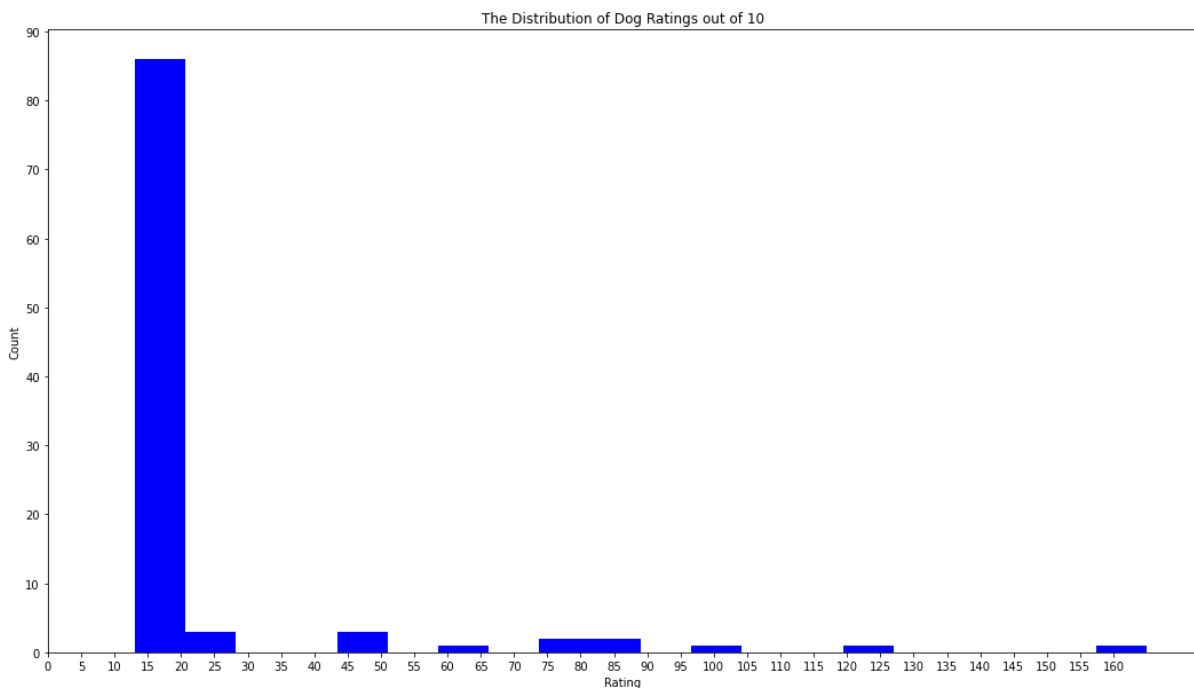
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Project: Analyze Data – We Rate Dogs

Analysis

Research Question 1: Which dogs are the most rated?

Filtering tweets by their first image prediction confidence level and plot the distribution of the 100 highest dog ratings.



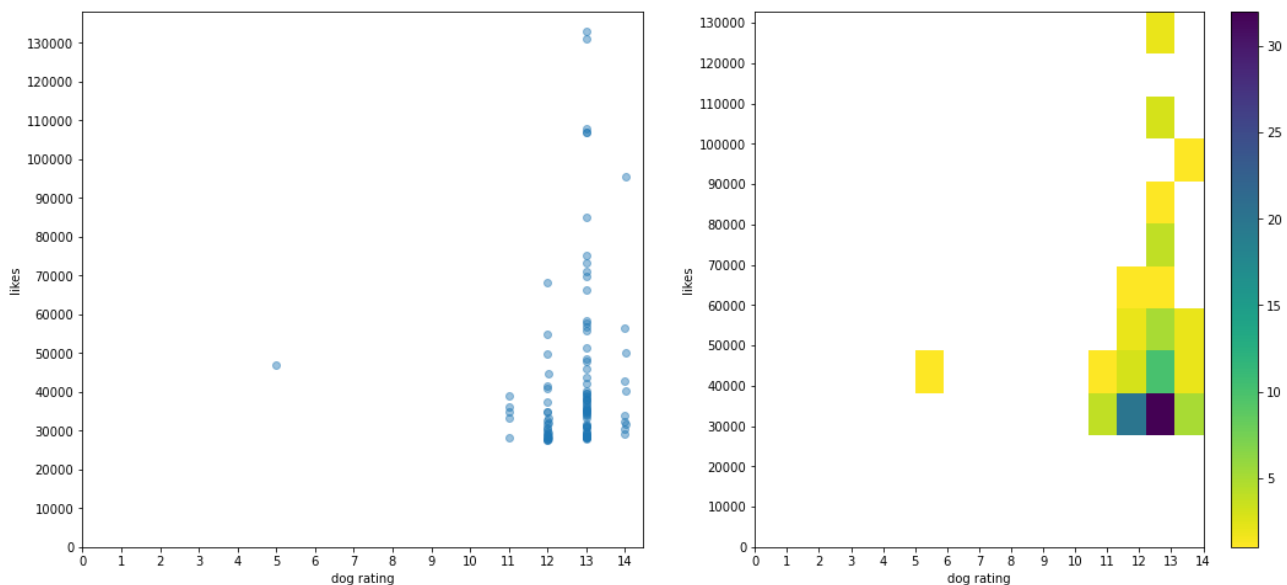
The histogram plots the frequency dog ratings out of 10.

- The data is highly skewed to the right with most of the dogs having a rating of 13.
- There is also a spike of dogs with a rating of 14.

The below table with tweets filtered by the top 20 highest dog ratings we see that a dog(s) of type Labrador_retriever is the highest rated with a rating of 165/10.

name	rating_numerator	favorites	retweets	breed_name	text	dog_stages
a	165	5316	2539	Labrador_retriever	Why does this never happen at my front door.....	
a	121	4225	1563	soft-coated_wheaten_terrier	Someone help the girl is being mugged. Several...	pupper
a	99	3062	829	golden_retriever	Happy Saturday here's 9 puppies on a bench. 99...	pupper
a	88	2927	1460	Labrador_retriever	Here we have an entire platoon of puppies. Tot...	pupper
a	84	13518	3716	West_Highland_white_terrier	The floofs have been released I repeat the flo...	floofer
a	80	2529	636	soft-coated_wheaten_terrier	Here's a brigade of puppies. All look very pre...	pupper
Logan	75	20296	7069	Pomeranian	This is Logan, the Chow who lived. He solemnly...	
a	60	3201	1028	Great_Pyrenees	Here is a whole flock of puppies. 60/50 I'll ...	pupper
Bluebert	50	2574	247	Siberian_husky	This is Bluebert. He just saw that both #Final...	
a	45	2634	721	borzoi	From left to right:\nCletus, Jerome, Alejandro...	
a	44	3748	1552	Labrador_retriever	Happy Wednesday here's a bucket of pups. 44/40...	puppo
Sophie	27	7320	1885	clumber	This is Sophie. She's a Jubilant Bush Pupper. ...	puppo
a	26	1879	542	kuvasz	Here we have uncovered an entire battalion of ...	pupper
Sam	24	5927	1655	golden_retriever	Meet Sam. She smiles 24/7 & secretly aspir...	
Cassie	14	32467	7711	Pembroke	This is Cassie. She is a college pup. Studying...	puppo
a	14	27478	5856	Pembroke	I present to you, Pup in Hat. Pup in Hat is gr...	puppo
a	14	50199	16570	Samoyed	Here is a pupper approaching maximum borkdrive...	pupper
Emmy	14	42876	7181	French_bulldog	This is Emmy. She was adopted today. Massive r...	puppo
Cermet	14	29086	6841	Chihuahua	This is Cermet, Paesh, and Morple. They are ab...	
a	14	33911	8285	black_and_tan_coonhound	Sometimes you guys remind me just how impactfu...	pupper

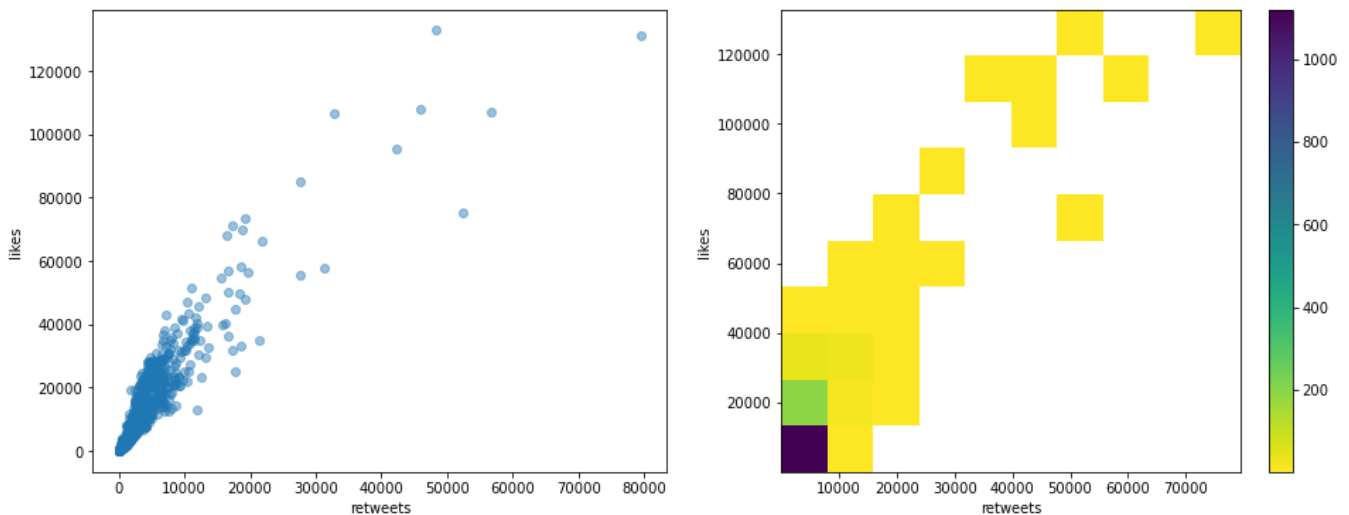
Research Question 2: Are the most rated dogs also the most liked?



From the scatter plot and heat plot of the top 100 most liked dogs above:

- Most dogs have a rating of 13 and 30 000 to 40 000 likes (area of high frequency in a dark color).
- The rating and favorites are not related. There is no noticeable upward or downward trend.
- A few dogs with a rating of 10 or less have likes of 40 000 and above.
- There are also a few dogs with an outrageous tweet like(100 000 and above) and a high rating of 13 out of 10

Research Question 3: Is there a relationship between dog ratings, favourites and retweets count?



From the scatter plot and heat plot above:

- Most dogs have 0 to 40 000 likes and 0 to 10 000 retweets (areas of high frequency).
- The tweet retweets and favorites are positively correlated - as favorites increase so does retweets.
- For most tweets likes are higher than retweets.
- Since favorites and ratings are not related, I conclude that retweets and ratings are not related too

Insights and Visualisation

From the above analysis, it can be concluded:

1. The highest rated dogs are not necessarily the ones with high twitter interactions.
2. Dogs that that are puppies get the highest interactions (See Figure 1)
3. Dogs predicted to be of the following breeds get the 10 highest twitter engagements.(See Figure 2)
 - a. Golden retrievers,
 - b. Pembroke,
 - c. Labrador retrievers
 - d. Chihuahua
 - e. French bulldog
 - f. Samoyed
 - g. Cardigan
 - h. Pug
 - i. Miniature Pinscher
 - j. Pomeranian

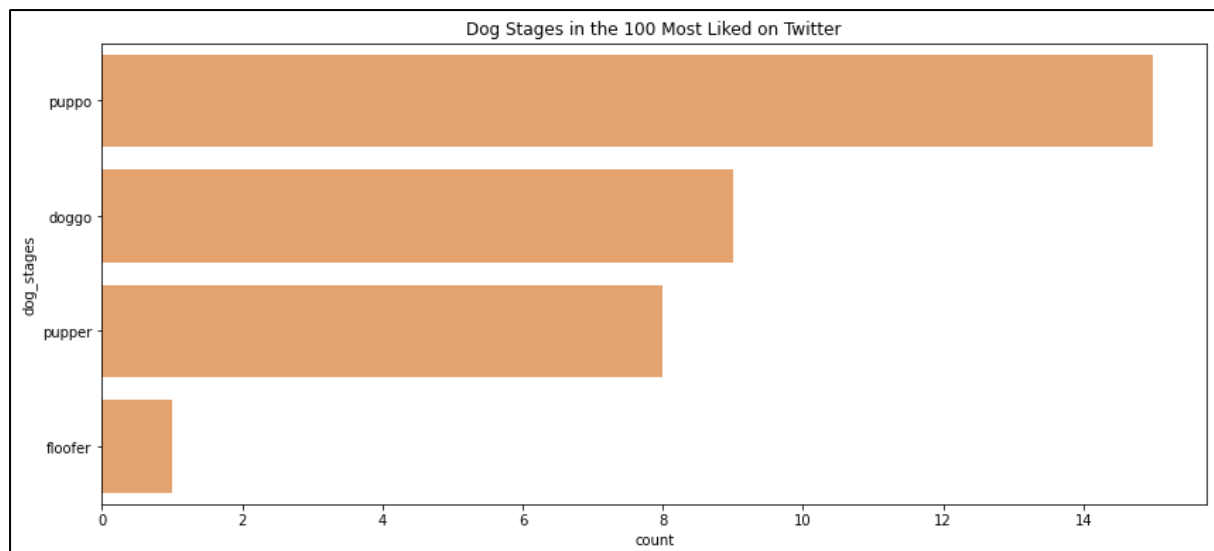


Figure 1: Dog Stages in the 100 Most Liked on Twitter

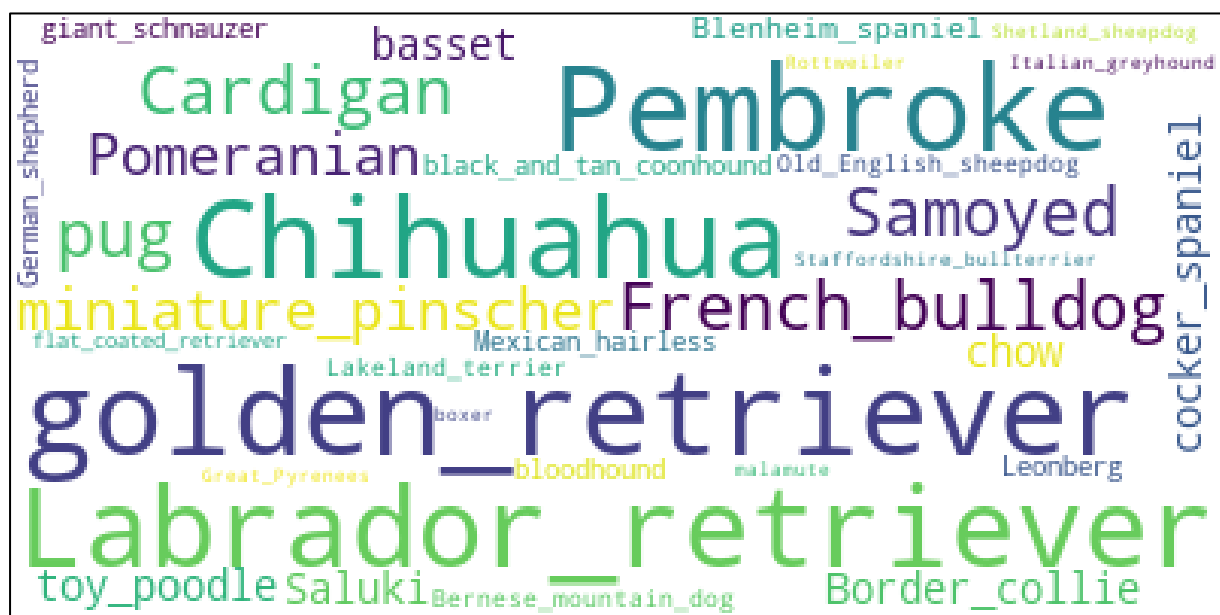


Figure 2: Dog Breeds in the 100 Most Liked on Twitter