

Project #4: Wrangle and Analyze Data

Analysis Report

Introduction

WeRateDogs is a Twitter account that rates people's dogs with a humorous comment about the dog. These ratings almost always have a denominator of 10. The numerators, though? Almost always greater than 10. 11/10, 12/10, 13/10, etc. This report's purpose is to describe the analysis and insight processes this data has been through.

1st insight: Favorite vs. Retweet Count

Retweet and Favorite count show a linear behaviour, with a coefficient of determination (R^2) equal to 0.83 ($R = 0.91$), and a slope equal to 2.38 (i.e., ~5 likes every 2 retweets).

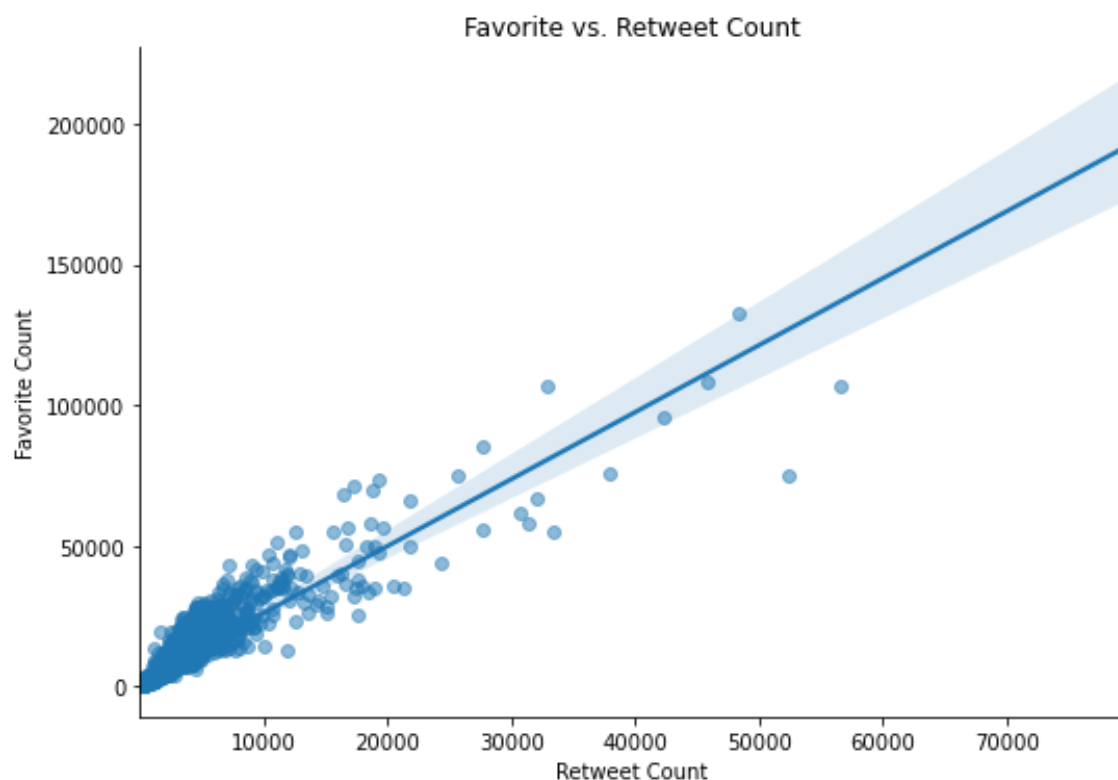


Figure 1: Favorite vs. Retweet Count

2nd insight: Most common dog breeds

The most common dogs that the algorithm could recognize are 'Golden Retriever', 'Labrador Retriever' and 'Pembroke', with 156, 107 and 94 appearances, respectively. The 'None' count was omitted since it is not important.

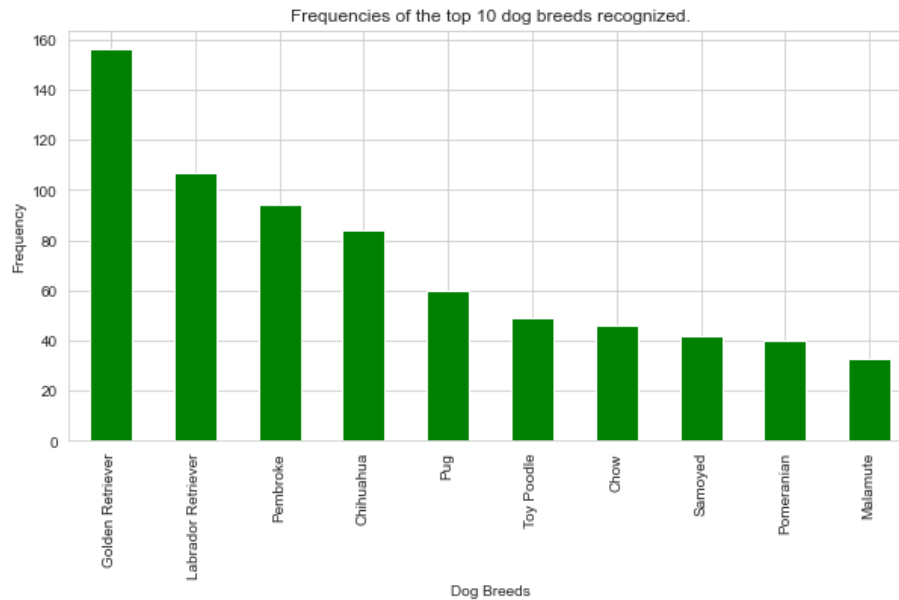


Figure 2: Frequencies of the top 10 dog breeds recognized

3rd insight: Most common dog types

The most common dog types that were assigned by the WeRateDogs CM are Pupper, Doggo, Puppo and Floofer, with 223, 72, 28 and 3 appearances, respectively.

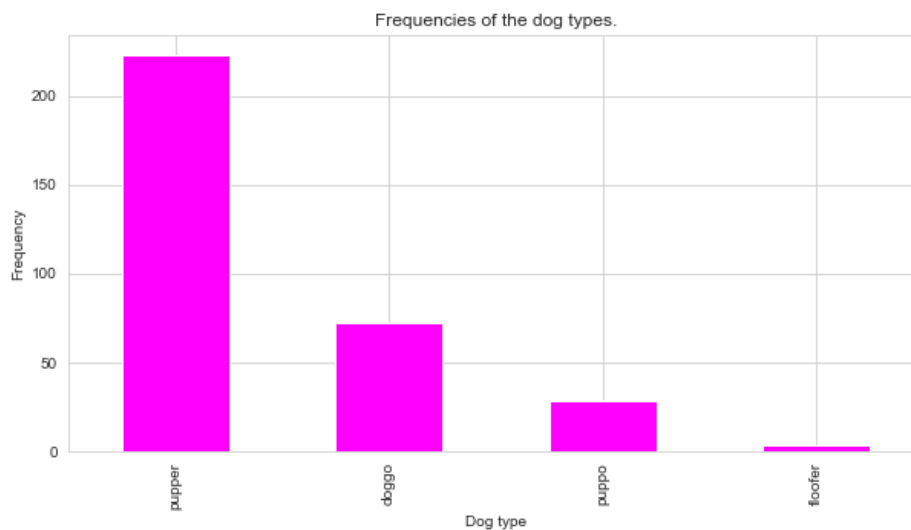


Figure 3: Frequencies of the dog types

4th insight: Most common names

There is not a very big difference between the top 5 most common names, but anyways, the most common dog names are Charlie with 11 appearances, and Cooper, Lucy and Oliver with 10 appearances.

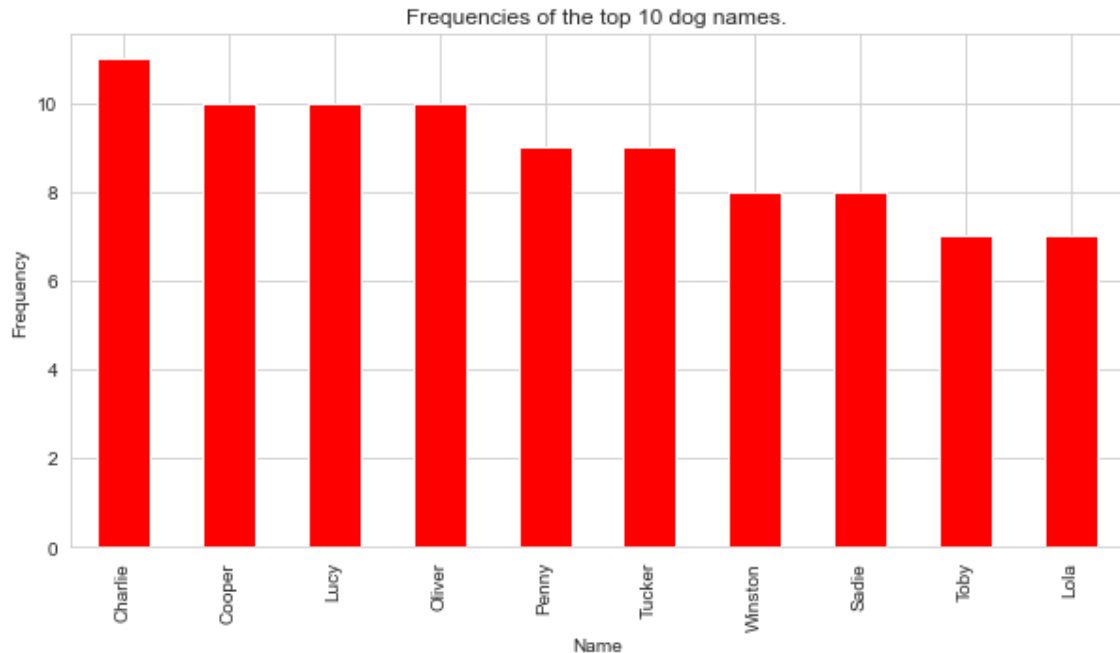


Figure 4: Frequencies of the top 10 dog names

5th insight: 'Likes' in the most favorited tweets

There are 5 dogs that got over 100.000 retweets, and those are:

tweet_id	timestamp	text	name	retweet_count	favorite_count	dog_type	rating	dog_breed
822872901745569793	2017-01-21 18:26:02	Here's a super supportive puppo participating ...	None	48265	132810	puppo	1.3	Lakeland Terrier
744234799360020481	2016-06-18 18:26:18	Here's a doggo realizing you can stand in a po...	None	79515	131075	doggo	1.3	Labrador Retriever
879415818425184262	2017-06-26 19:07:24	This is Duddles. He did an attempt. 13/10 some...	Duddles	45849	107956	NaN	1.3	English Springer
807106840509214720	2016-12-09 06:17:20	This is Stephan. He just wants to help. 13/10 ...	Stephan	56625	107015	NaN	1.3	Chihuahua
866450705531457537	2017-05-22 00:28:40	This is Jamesy. He gives a kiss to every other...	Jamesy	32883	106827	pupper	1.3	French Bulldog

The following plot shows when where they posted and how much favorited they were in comparison to the rest.

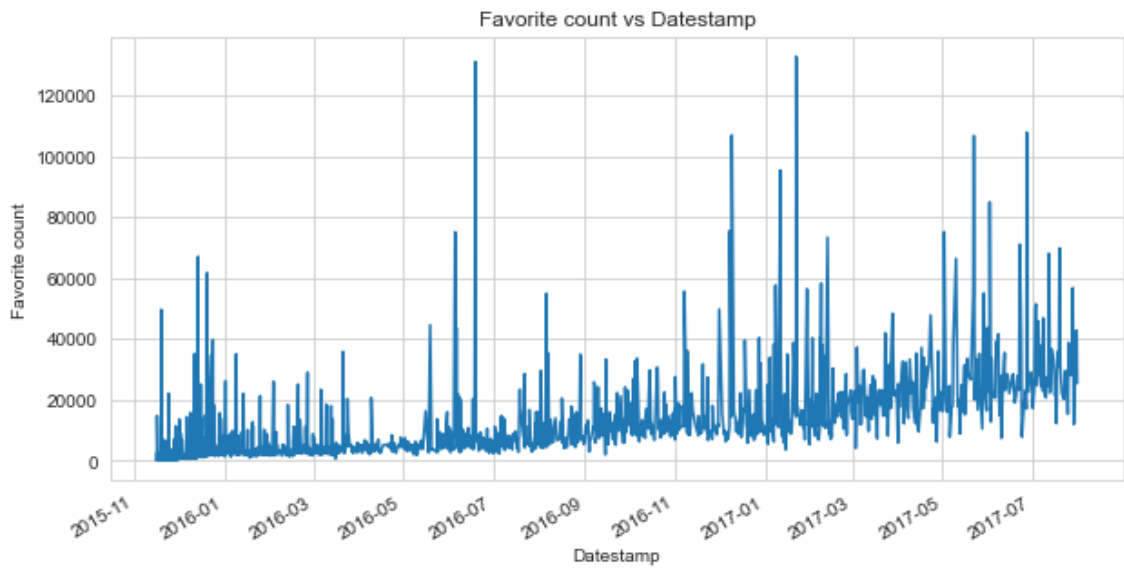


Figure 5: Favorite count vs Datestamp

I present to you, the most favorited and supportive dog, a Lakeland Terrier:



Figure 6: The most favorited dog

6th insight: 'Retweets' have the most retweeted tweets

There are 3 dogs that got over 50.000 retweets, and those are:

	tweet_id	timestamp	text	name	retweet_count	favorite_count	dog_type	rating	dog_breed
773	744234799360020481	2016-06-18 18:26:18	Here's a doggo realizing you can stand in a po...	None	79515	131075	doggo	1.3	Labrador Retriever
398	807106840509214720	2016-12-09 06:17:20	This is Stephan. He just wants to help. 13/10 ...	Stephan	56625	107015	NaN	1.3	Chihuahua
808	739238157791694849	2016-06-04 23:31:25	Here's a doggo blowing bubbles. It's downright...	None	52360	75163	doggo	1.3	Eskimo Dog

The following plot shows when where they posted and how much retweeted they were in comparison to the rest.

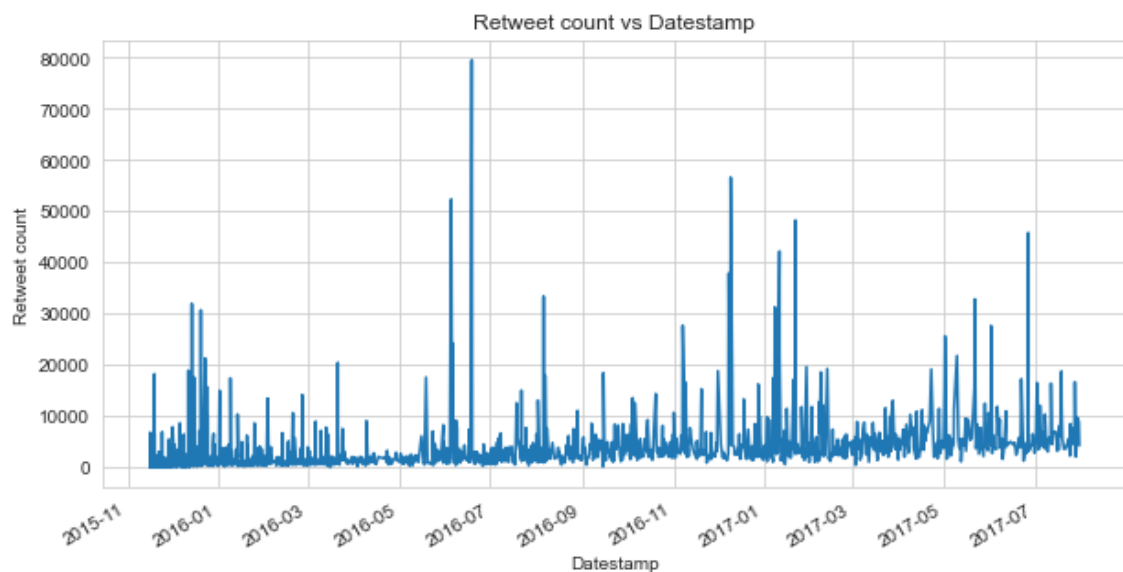


Figure 7: Retweet count vs Datestamp

I present to you, the most retweeted and fresh dog, a Labrador Retriever:



Figure 8: The most retweeted dog

7th insight: Dogs with the highest ratings

After all that has been discussed, I present to you the dogs with the highest ratings:

	tweet_id	timestam p	text	name	retweet_coun t	favorite_coun t	dog_typ e	rating	dog_bree d
724	749981277374128128	2016-07-04 15:00:45	This is Atticus. He's quite simply America af....	Atticus	2772	5569	NaN	177.600000	None
1716	670842764863651840	2015-11-29 05:52:33	After so many requests... here you go.\n\nGood. ..	None	4324	7989	NaN	42.000000	None
383	810984652412424192	2016-12-19 23:06:23	Meet Sam. She smiles 24/7 & secretly aspir...	Sam	1655	5927	NaN	3.428571	Golden Retriever
163	851464819735769094	2017-04-10 16:00:07	This is Iggy. He was a rescue dog killed in th...	Iggy	7855	25944	NaN	1.400000	None
144	856526610513747968	2017-04-24 15:13:52	THIS IS CHARLIE, MARK. HE DID JUST WANT TO SAY...	None	2068	12446	NaN	1.400000	Old English Sheepdog

And of course, here are their pictures, I can't help notice there is something weird with one of those dogs...

