

## Twitter WeRateDogs Project Analysis

### 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. Why? Because "they're good dogs Brent." This unique rating system is a big part of the popularity of WeRateDogs. WeRateDogs has over 4 million followers and has received international media coverage.

For this analysis, I gathered data from different sources.

- WeRateDogs downloaded their Twitter archive and sent it to Udacity via email exclusively to use in this project. This archive contains basic tweet data (tweet ID, timestamp, text, etc.) for all 5000+ of their tweets as they stood on August 1, 2017.
- The tweet image predictions, i.e., what breed of dog (or other object, animal, etc.) is present in each tweet according to a neural network. This file is hosted on Udacity's servers and is downloaded programmatically.
- Each tweet's retweet count and favorite ("like") count using the tweet IDs in the WeRateDogs Twitter archive by querying the Twitter API for each tweet's JSON data.

### 1. Descriptive Statistics :

	rating_numerator	rating_denominator	retweet_count	favorite_count
count	1979.000000	1979.000000	1980.000000	1980.000000
mean	12.805963	10.474987	2700.364141	8807.168182
std	41.616159	7.179397	4667.684612	12514.693995
min	0.000000	10.000000	13.000000	80.000000
25%	10.000000	10.000000	606.500000	1927.500000
50%	11.000000	10.000000	1311.000000	4029.500000
75%	12.000000	10.000000	3103.500000	11099.250000
max	1776.000000	170.000000	76971.000000	142784.000000

The numerator ratings have a mean value of 12.80. The denominator ratings are almost 10.

Let's see some interesting tweets about dogs !!!



One interesting result is the maximum numerator rating of 1776.

This rating may be given by the user to celebrate U.S independence. The year 1776 is celebrated in the United States as the official beginning of its nationhood, with the [Declaration of Independence](#) issued on July 4.

The tweet was posted on 4<sup>th</sup> July, 2016 stating "This is Atticus. He's quite simply America af."

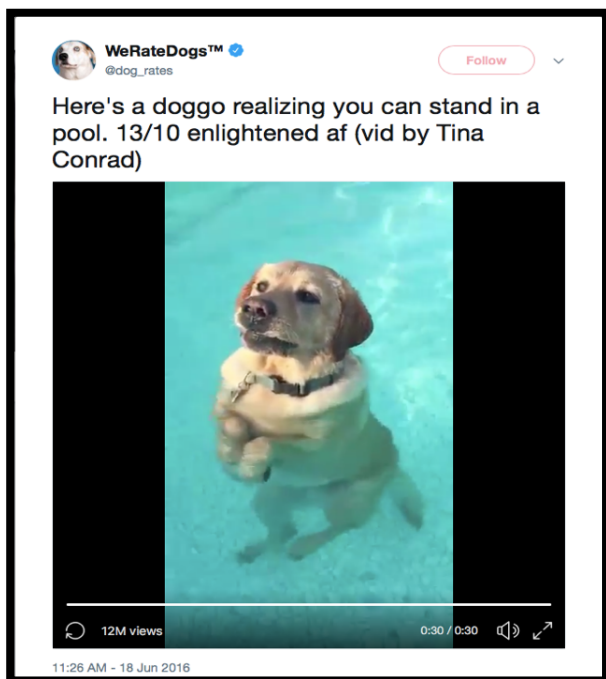
The tweet image prediction could not tell which breed of dog it is and predicted it as sunglasses and bow tie (because this is what he wears!)

This tweet at WeRateDogs has received the maximum likes as on August 1, 2017. The tweet was posted on 21<sup>ST</sup> January, 2017 when the largest single-day protest in U.S history took place, stating "Here's a super supportive puppo participating in the Toronto #WomensMarch today."

The maximum number of likes are may be due to the board which the dog is wearing to support the Women's March.

The Women's March was a worldwide protest on January 21, 2017, to advocate legislation and policies regarding human rights. Most of the rallies were aimed at Donald Trump, largely due to statements that he had made which were regarded by many as anti-women or otherwise offensive.



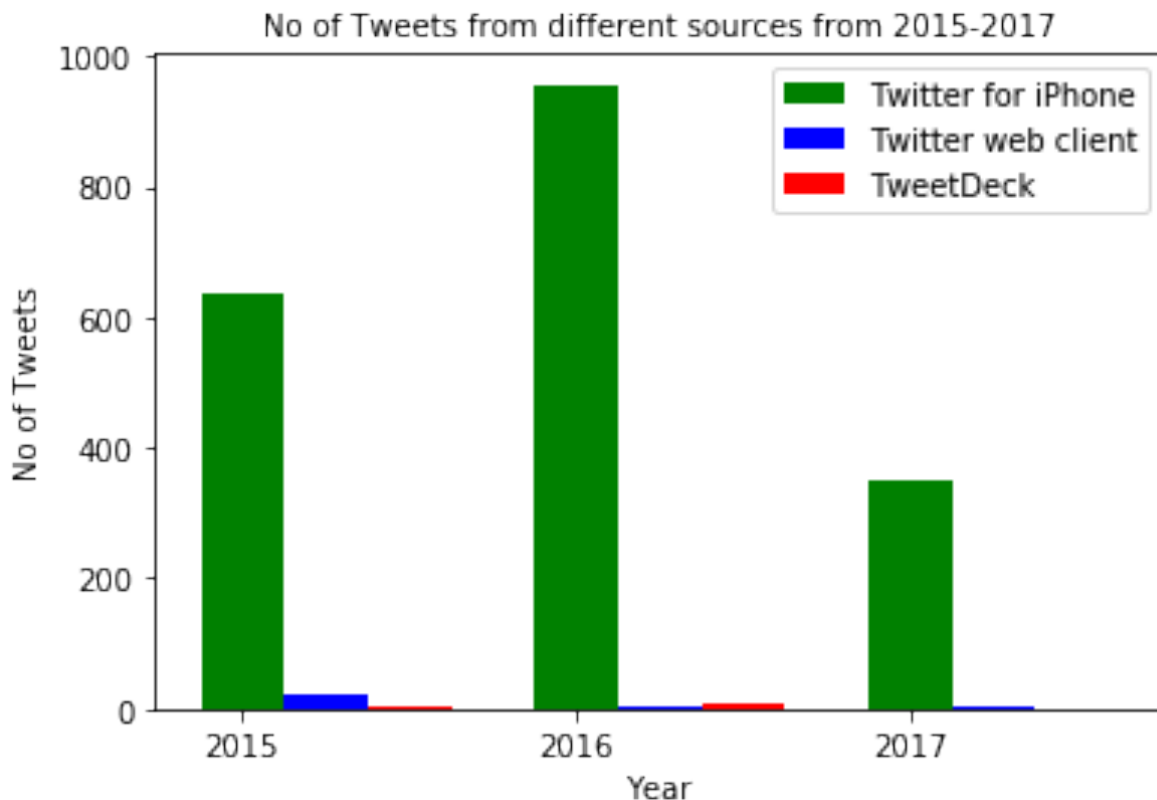


This tweet of WeRateDogs has the maximum retweet count as on August 1, 2017. This tweet contains a video of dog swimming and standing in a pool.

The tweet was posted on 18<sup>th</sup> June, 2016 stating “Here's a doggo realizing you can stand in a pool. 13/10 enlightened af (vid by Tina Conrad)”

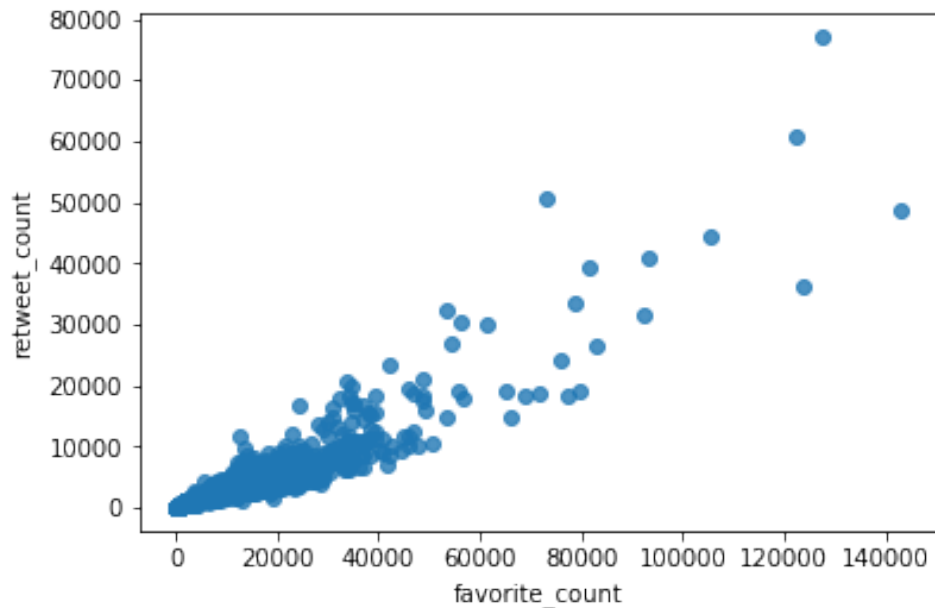
According to the image prediction, this is a Labrador Retriever.

## 2. Twitter sources :



This graph shows that the most common source for posting a tweet is through iPhone. The use of Twitter web client and Tweet Deck has been reduced.

### **3. Correlation between favorite and retweet counts :**



This scatterplot shows a positive relationship between favorite count and retweet count with a correlation of 0.917.

And this seems true also. The number of likes and post sharing increases with the popularity of the post.

### **4. Most frequent dog names :**

Here's a bar plot showing the most common dog names used in tweets at WeRateDogs.

The most common dog names are Oliver, Cooper, Charlie and Lucy.

