A Hilarious Twitter Account that Rates People's Dogs.

What can we learn from @dog_rates twitter activity from November 2015 to July 2017.

In 2015, Matt Nelson set up a Twitter poll from his personal profile asking if he should create a dog rating account; positive responses led him to create the account, which has since then been known for its adorable pictures of dogs, clever captions and dog ratings that almost always exceeds a perfect score of 10.

I have always loved dogs, and I beam with excitement when I hear others talk about these wonderful creatures. I have 12 of my own; It never gets old when a friend comes visiting for the first time, only to find 12 fluffy homeowners alerting us to their intrusion.

I cannot tell which was the best decision: Matt Nelson starting the WeRateDogs account; him sharing the twitter archive data with Udacity; or me applying for the ALX Udacity Nanodegree program. All I know is, I finally got my hands on data that informs me about my most beloved pets ever – Dogs!

After an arduous data gathering and cleaning process, I dived into analysis, wanting to know if my own beloved breeds, the German Shepherds, were popular on WeRateDogs twitter radar:

20 Most Popular Breeds
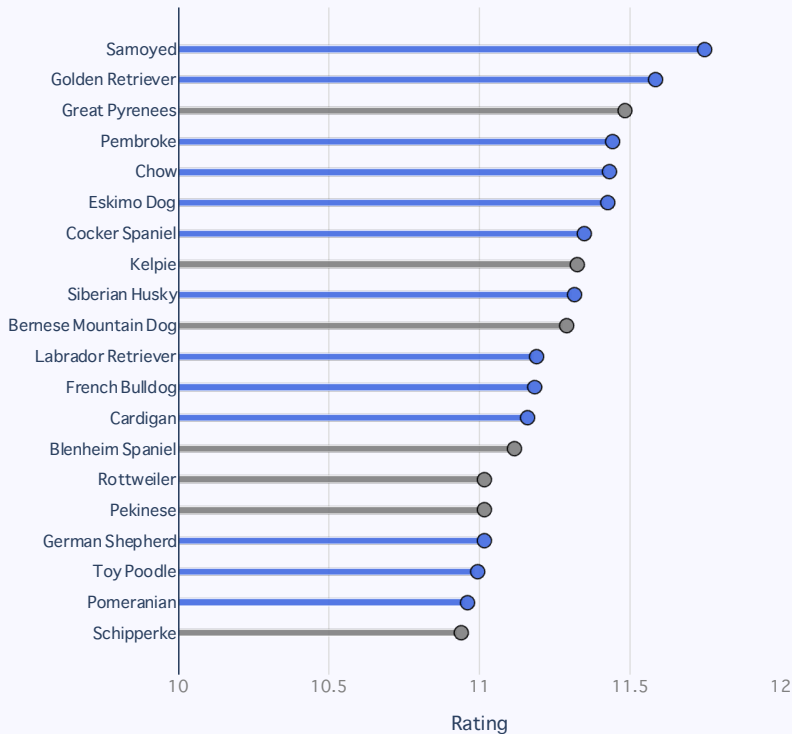Popular breeds ranked by number of tweets between Nov 2015 to Jul 2017.
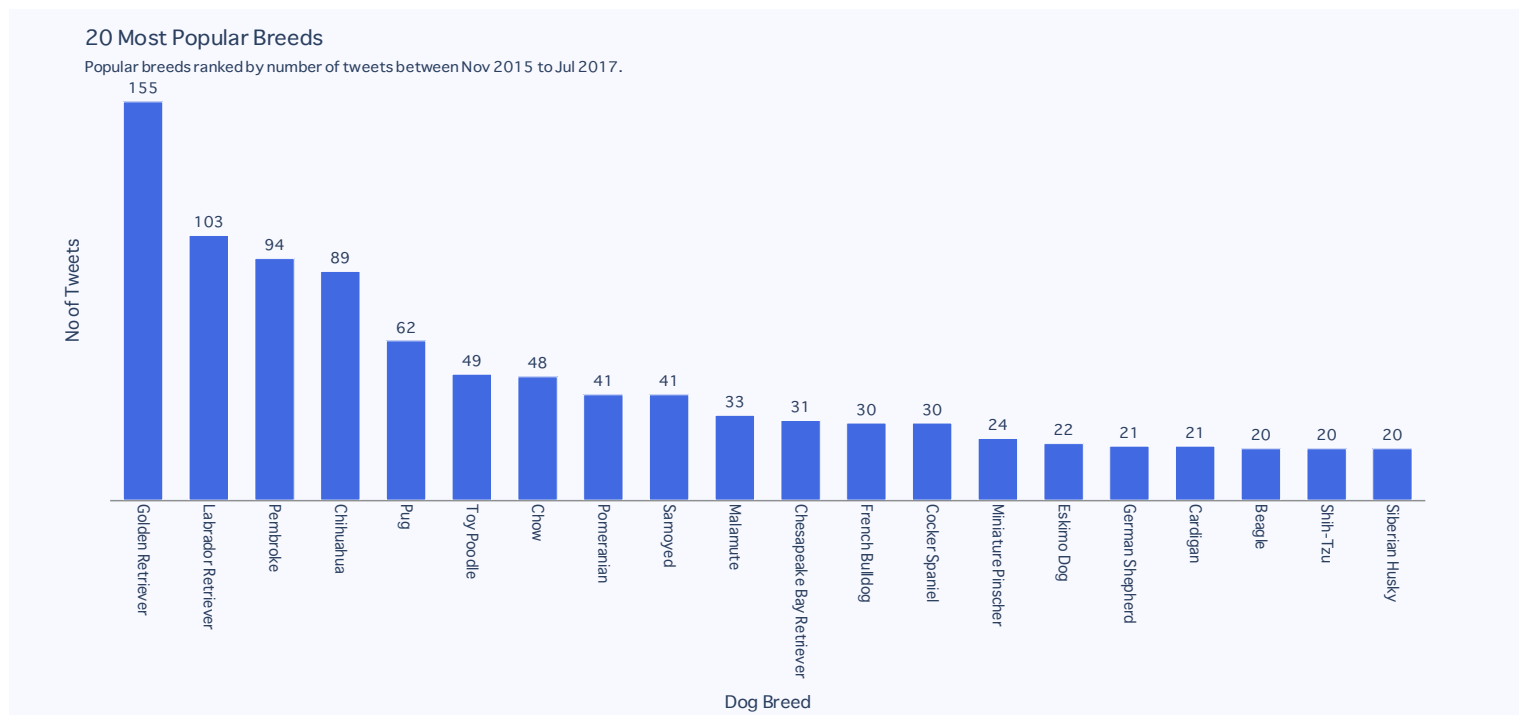
The Golden Retriever, Labrador retriever, Pembroke, Chihuahua, and the Pug were the top 5 most tweeted breeds. I hadn't even heard of some breeds on this leaderboard before, but I found solace in the fact that the German shepherds surfaced on the list. They were ranked 16th!

Popularity may not always translate to people's actual feelings. Perhaps, a better approach would also consider average rating as a metric. I tried to identify the top-rated breeds on average, computing a list of the top twenty.

Top 20 Breeds by Average Rating

The blue bars represent breeds that are also present on the popular 20 list.

Common denominator

Breed	Rating
Samoyed	(blue, ~11.75)
Golden Retriever	(blue, ~11.6)
Great Pyrenees	(gray, ~11.45)
Pembroke	(blue, ~11.45)
Chow	(blue, ~11.45)
Eskimo Dog	(blue, ~11.4)
Cocker Spaniel	(blue, ~11.35)
Kelpie	(gray, ~11.3)
Siberian Husky	(blue, ~11.3)
Bernese Mountain Dog	(gray, ~11.3)
Labrador Retriever	(blue, ~11.2)
French Bulldog	(blue, ~11.2)
Cardigan	(blue, ~11.15)
Blenheim Spaniel	(gray, ~11.1)
Rottweiler	(gray, ~11.0)
Pekinese	(gray, ~11.0)
German Shepherd	(blue, ~11.0)
Toy Poodle	(blue, ~10.95)
Pomeranian	(blue, ~10.9)
Schipperke	(gray, ~10.9)

Rating

Interestingly, majority of the of the popular breeds were still present on the list. In fact, **13** of the **20** records were popular breeds on WeRateDogs. The Samoyed was the highest rated on average. The Golden retriever, Great Pyrenees (not on the popular 20 list), Pembroke, and the Chow follow behind closely. **This time, the German Shepherds came 17th!**
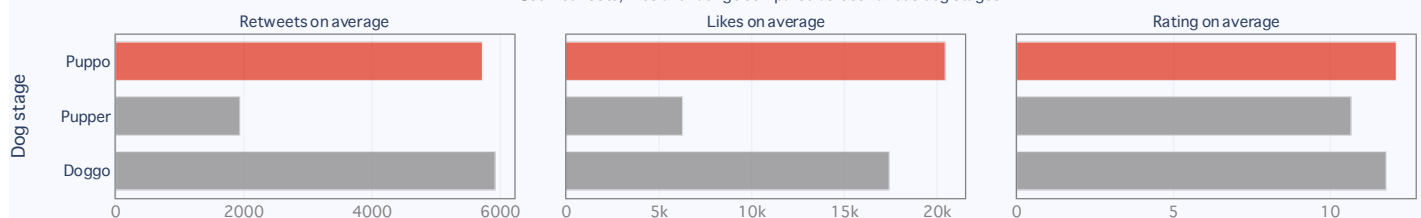
The Concept of Dog Stage:

As breeds compete for the top place on WeRateDogs tweets, dogs have also been carving their own niche on the internet, with lovely videos of puppies learning to swim or Chihuahuas wearing flower crowns. Interestingly, dogs have even earned themselves the right to be grouped into different live stages: *Puppers*, *Puppos* and *Doggos*, representing toddler, teenage and adult-stage dogs respectively. People's preference for these dog stages may vary. I particularly find teenage (puppos) and adult dogs(doggos) interesting. My female friends consider toddlers (puppers) cute. It would be interesting to visualize how people interact with the various dog stages too. The good news, we have just the data for that!

People Love and Rate Puppos; Doggos Gather Retweets!

User retweets, likes and ratings compared across various dog stages.

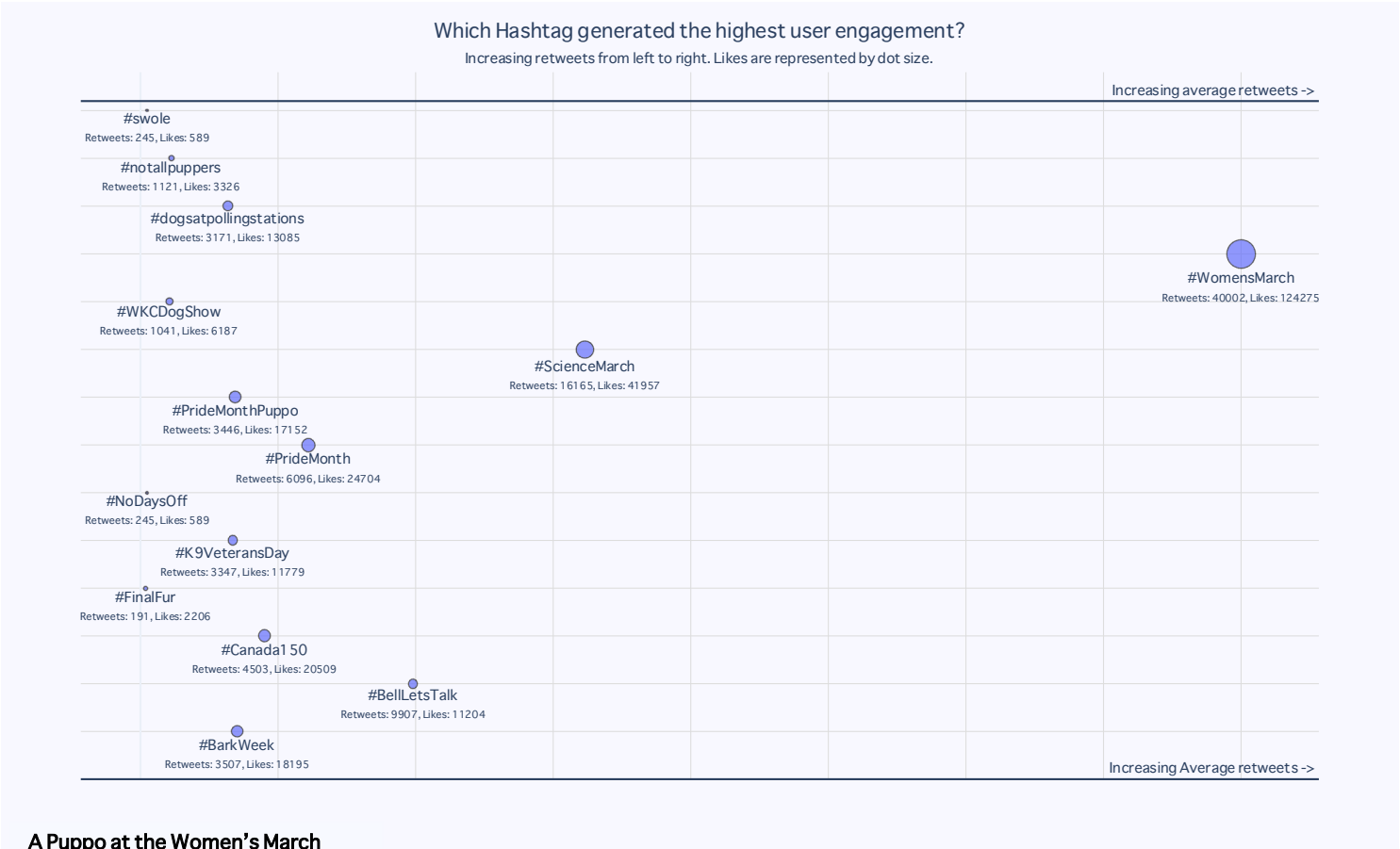| Dog stage	Retweets on average	Likes on average	Rating on average
Puppo	~5700 (red)	~20k+ (red)	~12 (red)
Pupper	~2000 (gray)	~6k (gray)	~10.5 (gray)
Doggo	~5900 (gray)	~17k (gray)	~12 (gray)

Puppos were the clear favorites, dominating in average likes (over 20,000) and ratings (12). Users also seemed to engage more with tweets involving doggos, as they gathered marginally more retweets than Puppos. Puppers received the least engagement on all three levels. Sorry girlfriends.

The Use of Hashtags:

Hashtags have been known to help users reach their target audience, because they make it easier for others to find information. Surprisingly, a whooping 98.8% of WeRateDogs tweets did not use any hashtags. On analyzing the remaining 1.2%, I observed that posts with hashtags generated far more engagement and ratings than those without. However, I could not make confident conclusions, knowing that 1.2% of our total data was far too insufficient to base any conclusions on.

A good alternative is to explore situations where hashtags were used, then try to identify the ones that generated the highest user engagements in form of retweets and likes:

Which Hashtag generated the highest user engagement?
Increasing retweets from left to right. Likes are represented by dot size.

Increasing average retweets ->

#swole
Retweets: 245, Likes: 589

#notallpuppers
Retweets: 1121, Likes: 3326

#dogsatpollingstations
Retweets: 3171, Likes: 13085

#WomensMarch
Retweets: 40002, Likes: 124275

#WKCDogShow
Retweets: 1041, Likes: 6187

#ScienceMarch
Retweets: 16165, Likes: 41957

#PrideMonthPuppo
Retweets: 3446, Likes: 17152

#PrideMonth
Retweets: 6096, Likes: 24704

#NoDaysOff
Retweets: 245, Likes: 589

#K9VeteransDay
Retweets: 3347, Likes: 11779

#FinalFur
Retweets: 191, Likes: 2206

#Canada150
Retweets: 4503, Likes: 20509

#BellLetsTalk
Retweets: 9907, Likes: 11204

#BarkWeek
Retweets: 3507, Likes: 18195

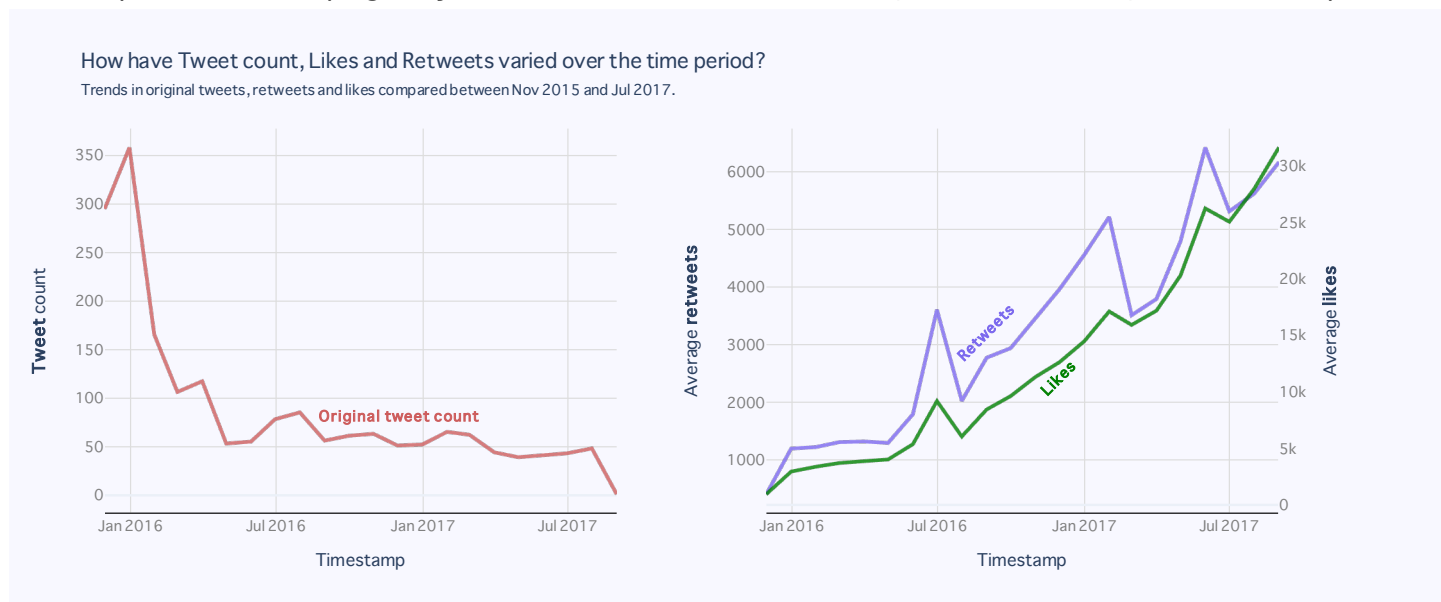Increasing Average retweets ->

A Puppo at the Women's March

#WomensMarch and #ScienceMarch generated the most engagements when used. The Women's March was a worldwide protest on January 2017, prompted by several of Trump's statements being considered by many as anti-women or otherwise offensive to women. It was the largest single-day protest in U.S. history. The Science March is an international series of rallies and marches to celebrate science and the role it plays in everyday lives. It held in Washington, D.C., and more than 600 other cities across the world on April 2017. The common thing here is that these two events had lots of followings, and some dogs seem to have participated too.

Marketing, less is probably more:

When we talk about social-media fame, we generally think of lucky accidents—an otherwise unpopular user posts something intended for a few friends, but by some magic it "goes viral", turning its creator into a star overnight. Then comes the question could cause thousands of sleepless nights: "How often should I post to social media?"

Of course, there's much more to a successful social media strategy than just posting the optimal number of times: it's not a magic formula. Still, there's a lot of pressure to find that sweet spot of frequency. No one wants to overwhelm their followers or spam their news feed. No one also wants to be forgotten or miss more and more avenues for exposure.

I decided to explore WeRateDogs tweets for insights. I observed how the total number of tweets have varied over the time period, while keeping an eye on the trends in user interactions (retweets and likes) over the same period:

How have Tweet count, Likes and Retweets varied over the time period?
Trends in original tweets, retweets and likes compared between Nov 2015 and Jul 2017.

How much is too much? How much is too little? I am still unable to tell. But, good news: you can stop your social posting panic. WeRateDogs posts have been declining over the time period, however interactions have been on the increase.

I am likely to retweet posts that I love:

For WeRateDogs posts, retweets and likes seemed to travel in the same direction, providing me with something to ponder on: I am likely to retweet posts that I love so that my friends could see and react to them too.

Is there a relationship between Retweets and Likes?
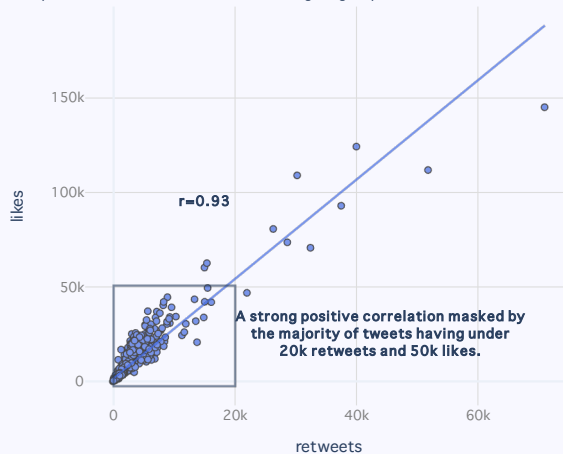A plot of retweets and likes for all WeRateDogs original posts.

A clearer association between Retweets and Likes
The log plot zooms into the relationship between retweets and likes for WeRateDogs posts.
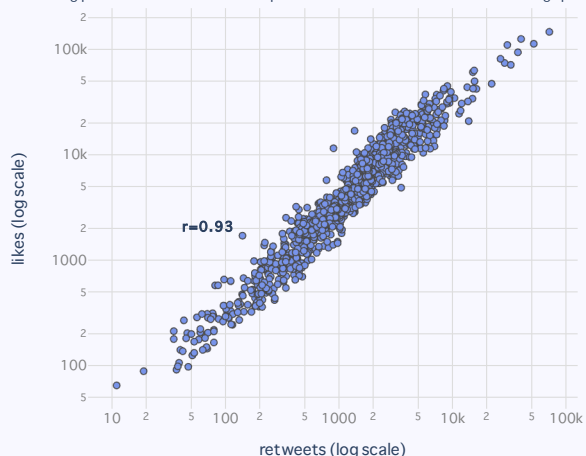
Investigating the relationship between retweets and likes became interesting to me. I knew there was a possibilty of having two types of posts: those with high interactions and others with only minimal interactions. Accounting for this was also important for me to visualize this relationship clearly.

In the end, I found a strong positive correlation between retweets and likes. This meant that I wasn't the only one, there were people out there who retweeted posts they liked too.

There is still much to learn from this dataset, and as Matt Nelson continues to build his twitter empire, there will be so much more to learn about the many dogs out there. For now, I will tend to my fluffy housemates, they deserve all the love in the world!