

# Behaviors of Tweets in WeRateDog

A tweet in **WeRateDog** (URL: [https://twitter.com/dog\\_rates](https://twitter.com/dog_rates)) contains photo(s) or video(s) of dog(s) accompanied by a funny comment and a rating. In this report, we analyzed the tweets in WeRateDog to grasp some properties of them. For our analysis, we have used nearly 2000 sample tweets submitted to WeRateDog.

One interesting point we have found is the statistical distribution of the favorite/retweet counts. As can be seen in the histograms on the right (Figure 1), **both of these counts seem to obey exponential distributions.** (We note that some outliers with large favorite/retweet counts are removed in these histograms.) It would be interesting to see if this is a general tendency for the tweets in other Twitter accounts.

Another point that we noticed is about correlations. As can be seen in the left-bottom figure (Figure 2, upper), **a tweet with a higher retweet count tends to have a high favorite count** and these

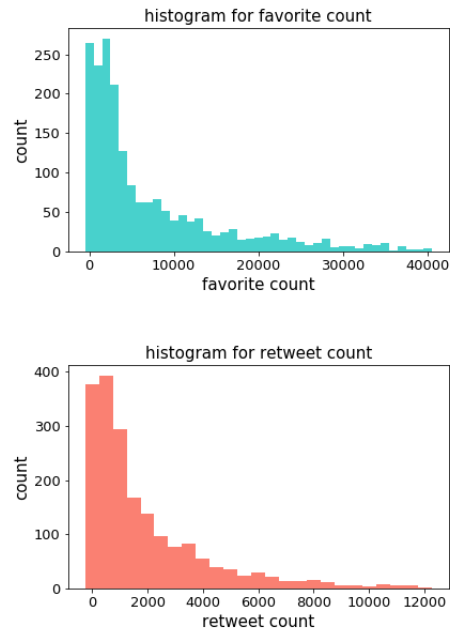


Figure 1. Histograms for favorite count (upper) and retweet count (lower)

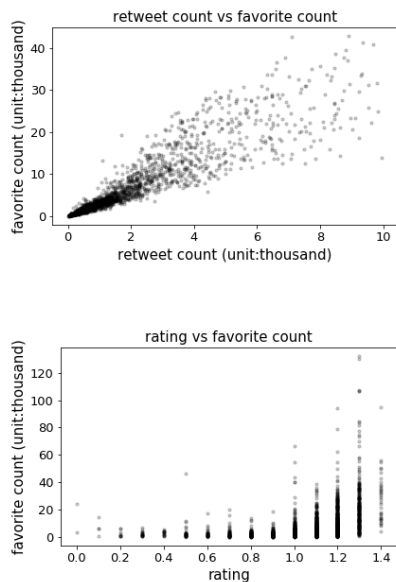


Figure 2. Scatter plots for rating vs favorite count (upper) and rating vs favorite count (lower)

two counts have a high correlation (0.915). This tendency seems natural. (We note that the outliers with high retweet count ( $\geq 10000$ ) (resp. high rating  $\geq 2$ ) were removed in the upper (resp. lower) plot in Figure 2.)

On the other hand, **the correlation between the rating and the favorite/retweet count is not significant** ( $< 0.41$  even after some outliers are removed). This indicates that **highly rated tweets do not necessarily have high favorite/retweet counts.** We however notice that, as can be seen from the scatter plot for rating vs favorite count in Figure 2 (lower), **to get a very high favorite count, a tweet needs to have a high rating** (for example, to have more than 80000 favorite counts, the rating needs to be more than 1.2). We have also confirmed a similar behavior for the rating and retweet count pair.