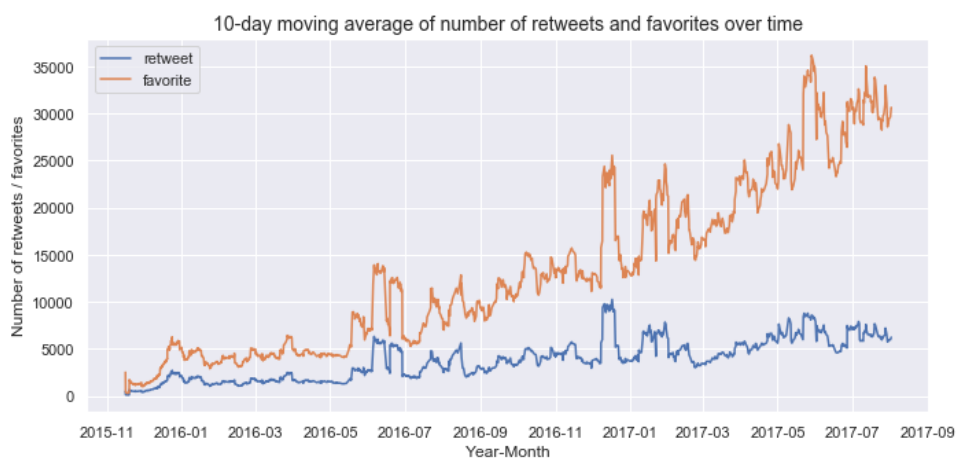# Act report – Georgios Pallas

Introduction

WeRateDogs is a very popular twitter page which posts dog photos and it also rates the dogs. The majority of the ratings are between 8/10 and 14/10. The page usually rates the dogs with scores above 10/10. The cases that the rating is below 10/10 is when dogs in the photos might be doing something "risky", or they are humorous posts that rate other animals and not dogs. The account currently has about 8 million followers.
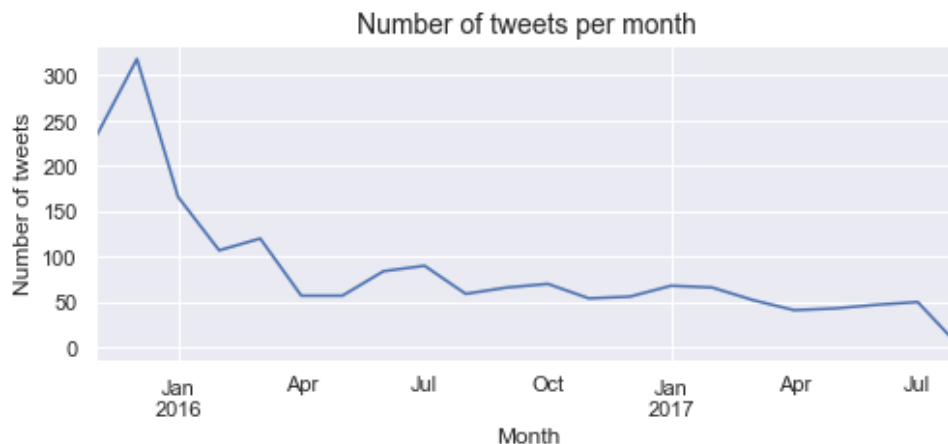
Popularity of tweets

In the following graph we can see the popularity of the tweets per year. It shows the number of retweets and favorites from November 2015 to August 2017.

We can see that both the retweets and favorites increase over time, with the highest increase to be found in the number of favorites. This is a good sign that the popularity of the page increases, which might be explained from an increase in the number of followers.
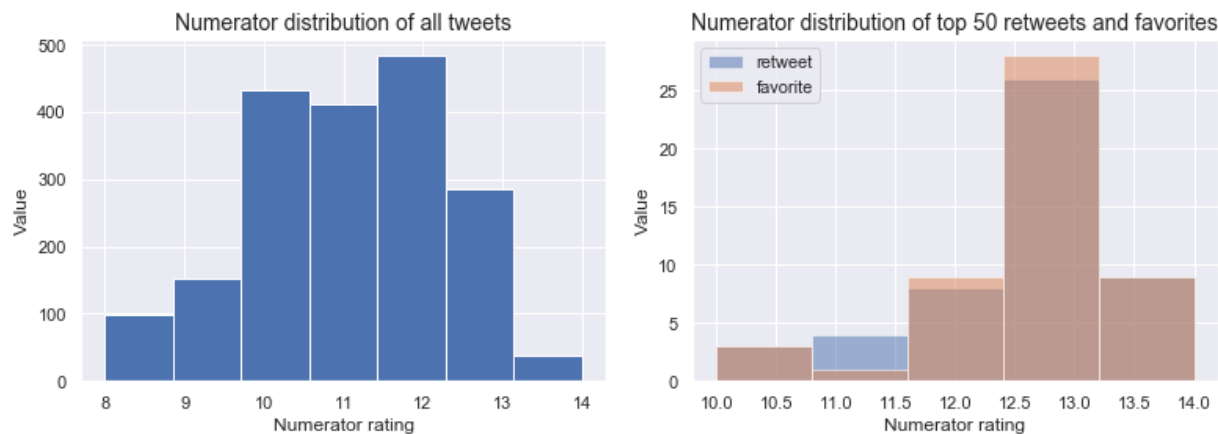
Number of tweets

In the following graph we can see the number of tweets of the page over time.

We can see that the page tweets less and less over the years. However, as we showed earlier the popularity has increased significantly at the same time period. It might be that the page has been tweeting more at the early time in order to build a bigger audience.

Rating distribution

The majority of the dogs have got a score between 10/10 and 12/10, with a significant number of dogs to get a score of 13/10, as can be seen in the left graph below (showing only the numerator values).
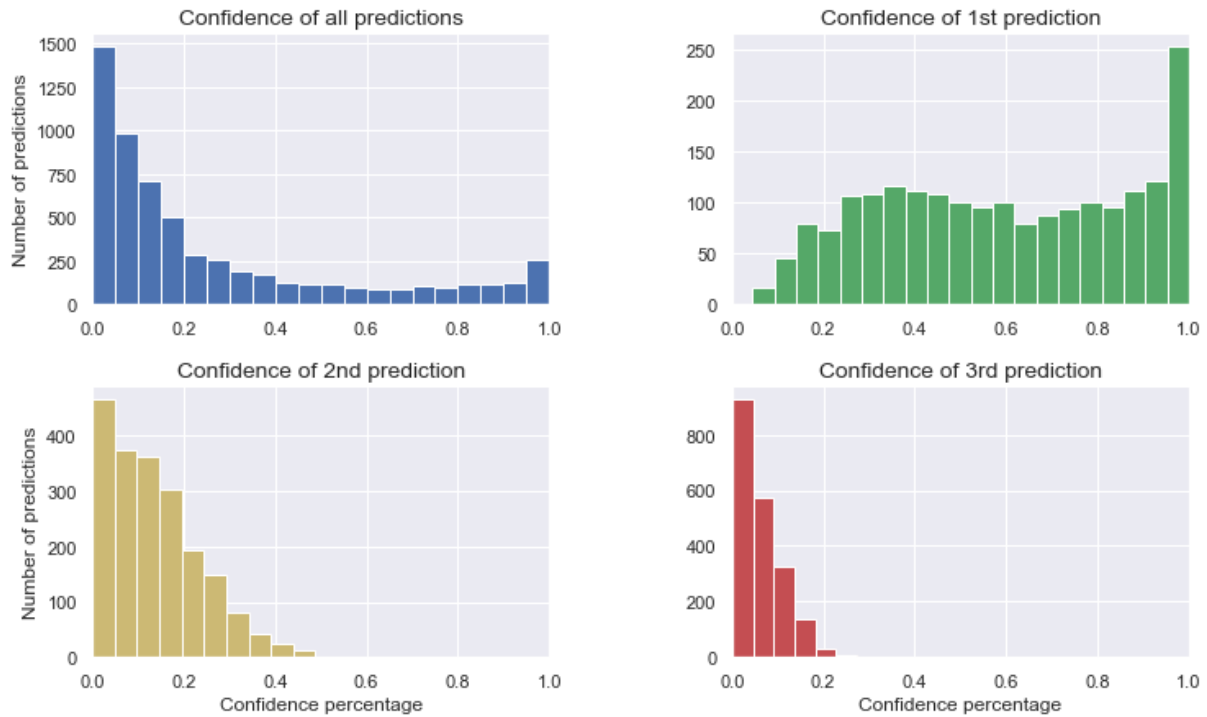

Among the top 50 tweets by number of retweets and favorites (right graph above) the majority of the dogs had a score of 13/10 followed by 14/10 and 12/10. We can however see that among the most popular tweets there are some with small dog ratings, 10/10. These are mostly humorous photos of dogs like the one in the following photo.

In this photo, there is a dog inside a bubble! This dog got a low score because he was "trapped" in the bubble, but of course is a very funny photo which explains the popularity.
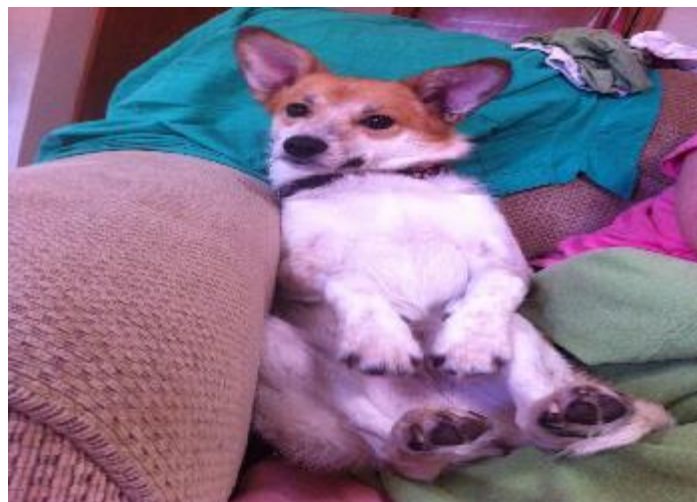
Image prediction

An image prediction algorithm has been used to try to identify the breed of the dogs! The algorithm was not that confident in predicting the photos, as we can see in the following graphs.

In these graphs we can see the confidence distributions overall (blue color), and also the confidence among different prediction trials of the algorithm. We can see for example, that even in the first prediction try (green color), there are many predictions with low confidence levels.

An example that the algorithm was not able to identify a dog, was the photo of the dog inside the bubble, in which the algorithm predicted that the photo shows a… bubble! Which is of course (partially) true. In the third prediction of that photo, the algorithm recognized the dog in the photo, however it failed to identify the breed – which is not easy because the photo is not that clear and even for a human with an experience in dog breeds it would not be easy to identify the breed –.

Another example that the algorithm failed to identify the breed was the following photo.

In the first try the algorithm saw a chihuahua with a 98% confidence. This dog looks more like a jack russell terrier. In the second try, the algorithm saw a toy terrier with a confidence below 1%, which is closer to the reality.

Other photos

Some very cute dogs!

More dogs!

And in some cases, there were other than dogs' photos tweeted from the account (usually the ones with scores below 10/10, since they are not dogs, however some of them are still very funny)!