act_report

October 18, 2022

0.1 Act_report

In this project, various tentative conclusions/inferences/observations will be derived from said analysis. Some of the analysis carried out in this project is aimed at observing the accuracy and extent of the neural network used to predict dog breeds from the tweets. Also the level of user interaction with WeRateDogs tweets. More information like users favorite dog breed were analyzed.

In the analysis and visualisation section, the following insights were tentaively inferred from analysis.

Insights:

1. Average dog ratings, confirming that users enjoy the content... (highest and lowest ratings)

The result of the analysis code block as seen in the wrangle_act notebook shows that over 75% of the dog ratings are at least 12/10 showing that content owners generally rate their dogs highly.

The result also shows there is an aveage dog rating of approximately 11.4, also emphasizing that content owners generally rate their dogs highly (given the ratings are above 10/10).

2. Tweet interactions (retweets, favourites) for various predicted breeds

The results of the analysis code blocks as seen in the wrangle_act notebook show the dog breeds that had the highest user interactions (retweets and favorites). The results show that users interacted most with tweets about golden retrievers, Labrador retrievers, Pembroke and Chihuahuas.

3. Diversity of the breeds recognizable by the 'model' used...

The results of the analysis code blocks as seen in the wrangle_act notebook show that the AI model used to predict the dog breeds from the tweeted photos had a vast range and was able to detect up to 113 different dog breeds. The most common of the dog breeds were Golden retrievers, Labrador retrievers, Pembrokes, Chihuahua and Pugs.

4. Average dog ratings for each breed... (most likeable dog breeds)

The results of the analysis code blocks as seen in the wrangle_act notebook show that the clumber breed has the highest average rating, with soft coated wheaten terrier, west highland white terrier, great pyrenees and chow dogs with the next highest average ratings.

In the visualisation section, some graphical representations of data are presented, buttressing the the various insights that were inferred.

The representations are seen in the visualisation section of the wrangle_act notebook.

The output of the following code blocks give the graphical representations for tweet interactions (retweets, favourites) for various predicted breeds.

```
In [11]: import pandas as pd
         import seaborn as sns
         import matplotlib.pyplot as plt
         %matplotlib inline
```

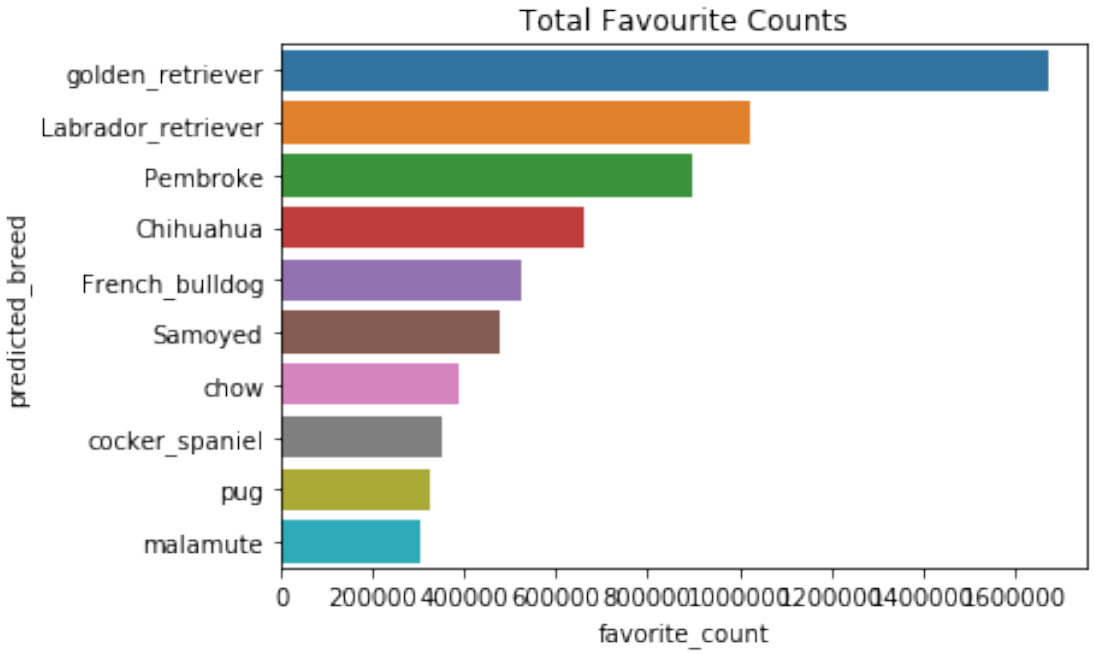
```
In [4]: twitter_archive_master = pd.read_csv('twitter_archive_master.csv')
```

```
In [5]: interactions_per_breed = twitter_archive_master.groupby("predicted_breed")['retweet_coun
```

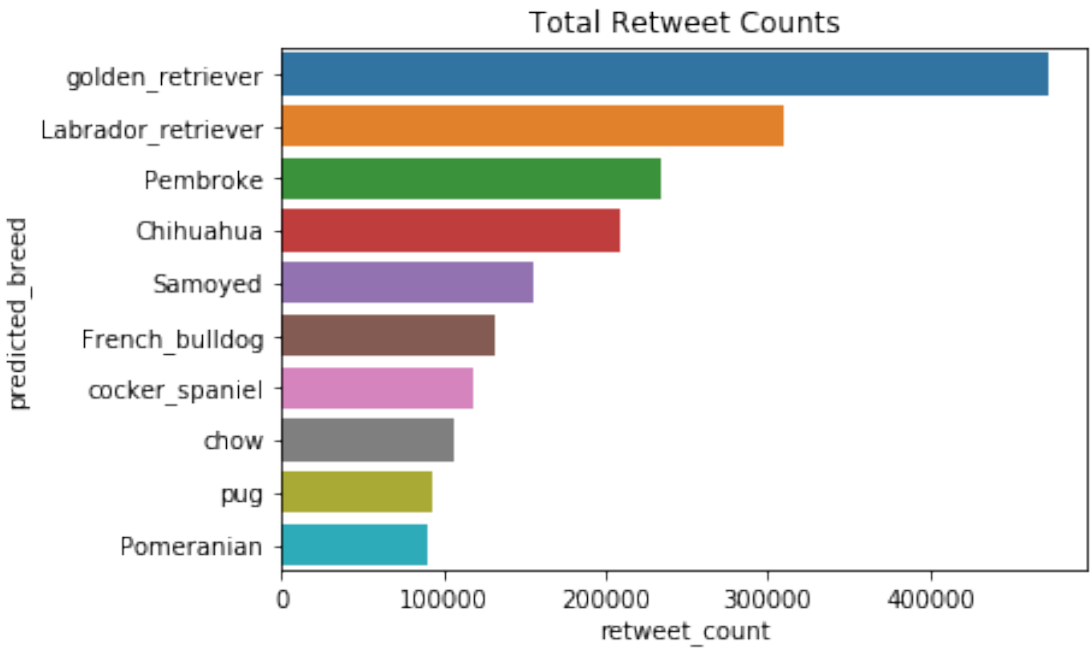
```
In [6]: retweet_interactions_per_breed = interactions_per_breed.sum()['retweet_count'].sort_valu
```

```
In [7]: favorite_interactions_per_breed = interactions_per_breed.sum()['favorite_count'].sort_va
```

```
In [12]: sns.barplot(y="predicted_breed", x="favorite_count", data=favorite_interactions_per_bre
         plt.title("Total Favourite Counts");
```




```
In [13]: sns.barplot(y="predicted_breed", x="retweet_count", data=retweet_interactions_per_breed
         plt.title("Total Retweet Counts");
```



The barplots show the dog breeds that had the highest user interactions (retweets and favorites). The results show that users interacted most with tweets about golden retrievers, Labrador retrievers, Pembroke and Chihuahuas.

In [ ]: