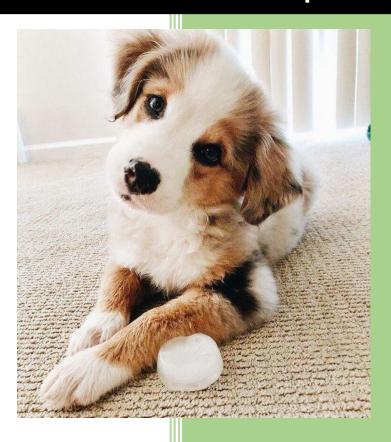
Act Report



Udacity Data Wrangling Project

1. Intro

This Report is a brief analysis and visualization of the archive and image_prediction datasets after the data wrangling process

2. Image Prediction dataset

2.1. How is the algorithm predictions performance?

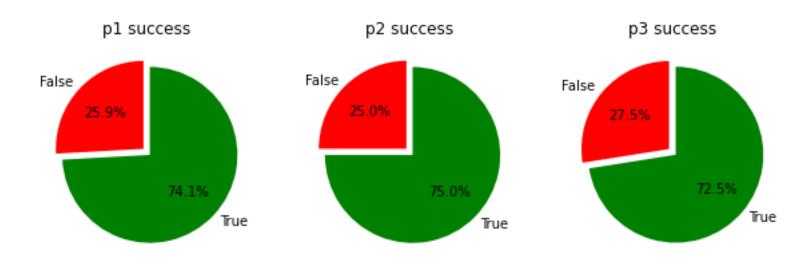


Figure 2.1.1 Predictions success to define dog breed

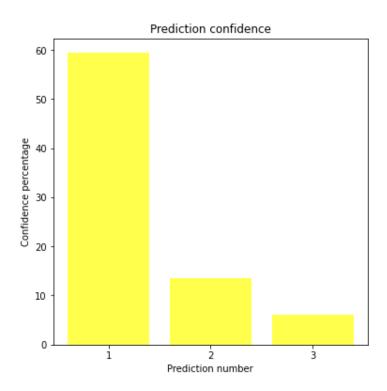


Figure 2.1.2 Prediction Confidence to define dog breed

Notes:

As shown in Graphs below, Each prediction of the algorithm has similar percentage of determining whether the image has a dog or not but the **first prediction** have the higher confidence of determining the dog breed as defined that first prediction is the most likely prediction.

2.2. What is the ten most predicted breeds?

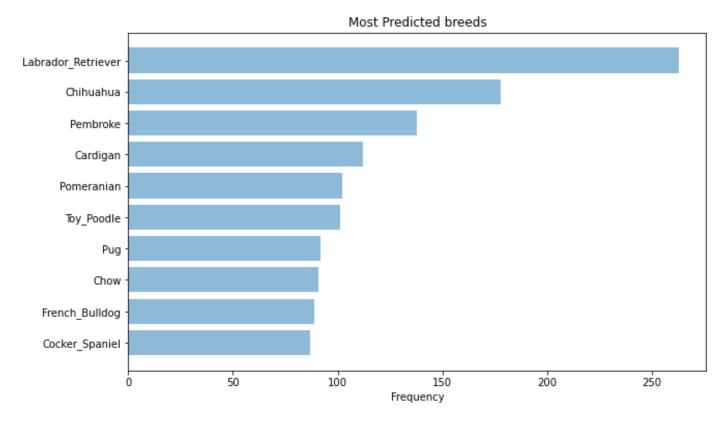


Figure 2.2.1 The ten most predicted breeds

Notes:

From the graph below, It is noticed that **Labrador_Retriever** is the most predicted breed by the algorithm and this is normal as **Labrador_Retriever** is the most popular breed worldwide <u>Source</u>

3. Archive dataset

3.1. How is the tweets' interaction per month?

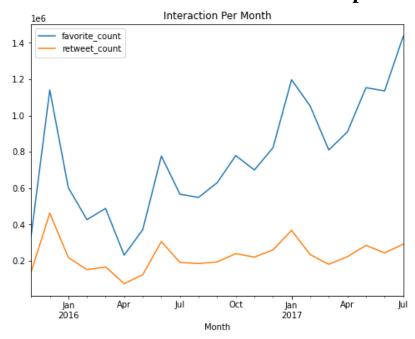


Figure 3.1.1 favorites and retweets per month

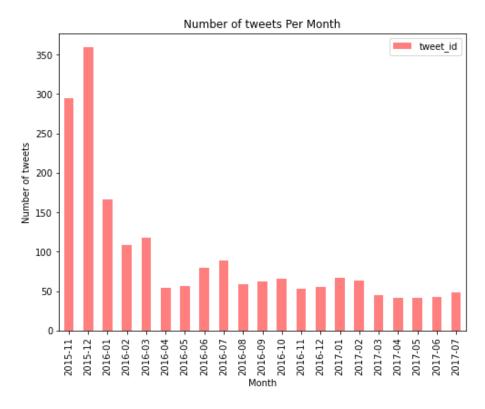


Figure 3.1.2. number of tweets per month

	favorite_count	month_year
763	152885	2016-06
302	130410	2017-01
393	118043	2016-12
107	114232	2017-05
798	113038	2016-06
58	97410	2017-06
326	86515	2017-01
133	84788	2017-05
1402	77508	2015-12
92	77243	2017-06

Figure 3.1.3. Most interacted tweets

Notes:

As shown in figure 3.1.1, 3.1.2 and 3.1.3:

- From 11-2015 to 4-2016, the account posted a lot of tweets to get a lot of favourites and retweets and when tweets decreases, the favourites and retweets decreases.
- From **5-2016** to **7-2017**, there was an increase in favourites and retweets although the number of tweets decreases. Some tweets gone viral as the maximum favorited tweets is in this period.

3.2. What is the source of tweets?

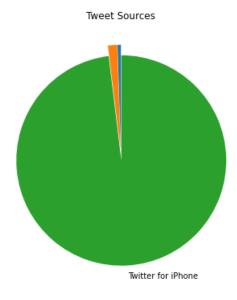


Figure 3.2.1 Tweet sources

As shown in the graph below, Almost all tweets sent from an iPhone which indicate that the account is managed by persons not by a company or an agency and with some search it appears that WeRateDogs account is managed by a college student called Matt Nelson <u>Source</u>