# **Key Insights Report**

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#### Question 1: What stage of dogs gets the most favorites?

When people tweeted posts on WeRateDogs, lots of them included the dog stage. In the twitter archive dataset there are three dog stages, including doggo, puppo, and pupper and floofer.

The favorite counts for each stage can figure out this question.

Doggo tops with 96902 favorites, puppo comes in second with 69426. Floofer drops in number with only 30375 favorites and pupper gets the least, with only 18370.

### Insight 1:

Doggo tops the chart, and attracts more than 5 times in favorite count compared with the last spot, pupper.

## Question 2: Does the number of images affect the prediction?

By getting the average confidence level of the model's first prediction (that is, the model's most confident guess) for different number groups, we can see the solid numbers.

When a post comes with 1 image, the confidence level of the model's first prediction is 0.57; when the number of images is 2, the confidence level jumps to 0.7; 0.75 for 3 images, and impressive 0.82 for 4 images.

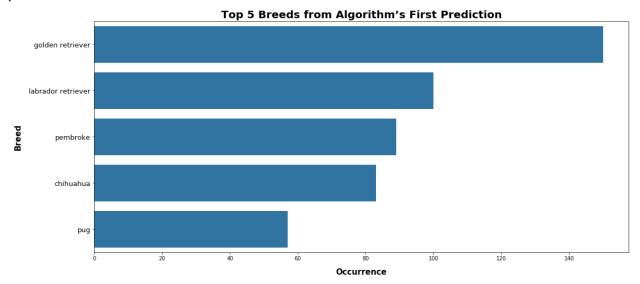
## Insight 2:

So a post with more images of a dog will definitely help the image prediction model better classify the breed of the dog, achieving a jump from 0.57 with 1 image to 0.82 with 4 images.

## Question 3: What are the top 5 breeds as algorithm's first prediction?

This question is answered by counting the occurrence of each breed as the first prediction in image prediction model.

The bar chart is used to show the top 5 breeds and their occurrences as the first prediction.



Golden retriever wins in number with 150 occurrences. Labrador retriever is in second place with 100. Pembroke with almost 90, followed by Chihuahua with a little over 80. Pug gets the last spot with close to 60.

#### Insight:

The top 5 breeds by algorithm's first prediction are golden retriever, labrador retriever, pembroke, chihuahua, and pug. Golden retriever is the big winner in number.



Golden Retriever wins! Photo: iStock.com/Leoba

# Question 4: What does the highest rating post image look like?

Who isn't curious about this question? There might be clues for us to take a high rating picture.



# Insight:

next time you are ambitious to tweet a high rating post, try adding patriotic but meanwhile adorable element!