

Image classification

1. Description

By following the procedure describe in

<https://www.tensorflow.org/tutorials/images/classification>, I will create a model that will give back the class that the image corresponds to. I will be classifying bird species.

2. Dataset <https://www.kaggle.com/datasets/gpiosenka/100-bird-species>

This dataset has around 500 bird species. Since using such a big dataset will take a lot of time to train, I will concentrate on 11 bird species that has around 200 images for each.

3. Methodology

3.a: To process the data, I will increase the number of images per species by using cv2 functions.

3.b: I will be using the Sequential model in Keras that is a Convolutional Neural Network model.

3.c: I will be using the accuracy metric defined in Keras model.

4. Application

I wanted to create a webapp such that the user will provide an image of bird and the program will give back the species of the bird.