TOPIC : AI powered nutrition analyzer for fitness enthusiasts

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Image Preprocessing

we will be improve the image data that suppresses unwilling distortions or enhances some image features important for further processing, although performing some geometric transformations of images like rotation, scaling, translation, etc.

1)Import The ImageDataGenerator Library

2)Configure ImageDataGenerator Class

3)Apply Image DataGenerator Functionality To Trainset And Testset

The Keras deep learning neural network library provides the capability to fit models using image data augmentation via the ImageDataGenerator class.
Let us import the ImageDataGenerator class from Keras

There are five main types of data augmentation techniques for image data; specifically:

Image shifts via the width_shift_range and height_shift_range arguments.
The image flips via the horizontal_flip and vertical_flip arguments.
Image rotations via the rotation_range argument
Image brightness via the brightness_range argument.
Image zoom via the zoom_range argument.

Let us apply ImageDataGenerator functionality to Trainset and Testset by using the following code
For Training set using flow_from_directory function.