Team ID	LTVIP2025TMIDS67751
Project Name	Al-powered nutrition analyzer for fitness enthusiasts

Configure ImageDataGenerator Class

ImageDataGenerator class is instantiated and the configuration for the types of data augmentation

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.

An instance of the ImageDataGenerator class can be constructed for train and test.

Image Data Agumentation

#setting parameter for Image Data agumentation to the traing data

train_datagen = ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,horizontal_flip=True)

#Image Data agumentation to the testing data

test_datagen=ImageDataGenerator(rescale=1./255)