

# Configure ImageDataGenerator Class

Assignment Date	15 November 2022
Team ID	PNT2022TMID05403
Project Name	AI-Powered Nutrition Analyzer For Fitness Enthusiasts

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)
```