

# 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)
```