

Image Preprocessing

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Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts

Apply Image DataGenerator Functionality To Trainset And Testset

Apply ImageDataGenerator functionality to Trainset and Testset by using the following code

For Training set using `flow_from_directory` function.

This function will return batches of images from the subdirectories together with labels

Arguments:

directory: Directory where the data is located. If labels are "inferred", it should contain subdirectories, each containing images for a class. Otherwise, the directory structure is ignored.

batch_size: Size of the batches of data. Default: 32.

target_size: Size to resize images after they are read

from disk. **class_mode:**

- 'int': means that the labels are encoded as integers (e.g. for `sparse_categorical_crossentropy` loss).
- 'categorical' means that the labels are encoded as a categorical vector (e.g. for `categorical_crossentropy` loss).
- 'binary' means that the labels are encoded as float32 scalars with values 0 or 1 (e.g. for `binary_crossentropy`).

```
[ ] xtrain = train_datagen.flow_from_directory('Food/Train data/',  
                                              target_size=(64,64),  
                                              class_mode='categorical',  
                                              batch_size=100)
```

Found 152 images belonging to 10 classes.

```
▶ xtest = test_datagen.flow_from_directory('Food/Testdata',  
                                           target_size=(64,64),  
                                           class_mode='categorical',  
                                           batch_size=100)
```

Found 152 images belonging to 10 classes.
