

EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

MODEL BUILDING

IMPORTING THE MODEL BUILDING LIBRARIES

Date	09 November 2022
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Project Name	Emerging Methods for Early Detection of Forest Fires

Importing The ImageDataGenerator Library import keras from
keras.preprocessing.image import ImageDataGenerator *Define the
parameters/arguments for ImageDataGenerator class*
train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,rotation_range=180,zoom_range=0.2, horizontal_flip=True)
test_datagen=ImageDataGenerator(rescale=1./255) *Applying
ImageDataGenerator functionality to trainset*
x_train=train_datagen.flow_from_directory(r'/content/drive/My Drive/
Dataset/train_set',target_size=(128,128),batch_size=32,
class_mode='binary')
Found 436 images belonging to 2 classes.

Applying ImageDataGenerator functionality to testset

```
x_test=test_datagen.flow_from_directory(r'/content/drive/MyDrive  
/ Dataset/test_set',target_size=(128,128),batch_size=32,  
class_mode='binary')
```

Found 121 images belonging to 2 classes.

Import model building libraries

```
#To define Linear initialisation import Sequential  
from keras.models import Sequential #To add  
layers import Dense from keras.layers import  
Dense  
#To create Convolution kernel import Convolution2D from  
keras.layers import Convolution2D  
#import Maxpooling layer  
from keras.layers import MaxPooling2D  
#import flatten layer from  
keras.layers import Flatten  
import warnings  
warnings.filterwarnings('ignore')
```