

EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE

IMAGE PREPROCESSING

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Project Name	Emerging Methods for Early Detection Of Forest Fire.

```
!pip install libgl1-mesa-dev
import tensorflow as tf
import numpy as np
from tensorflow import keras
import os
from tensorflow.keras.preprocessing.image import ImageDataGenerator
from tensorflow.keras.preprocessing import image
```

ERROR: Could not find a version that satisfies the requirement libgl1-mesa-dev (from versions: none)
ERROR: No matching distribution found for libgl1-mesa-dev

#Define the parameters/arguments for ImageDataGenerator class

```
train=ImageDataGenerator(rescale=1./255, shear_range=0.2, rotation_range=180, zoom_range=0.2, horizontal_flip=True)
train = ImageDataGenerator(rescale=1/255)
test = ImageDataGenerator(rescale=1/255)
```

Applying ImageDataGenerator functionality to trainset

```
x_train = train.flow_from_directory("/home/wsuser/work/Dataset/Dataset/train_set",
                                   target_size=(64,64),
                                   batch_size = 32,
                                   class_mode = 'binary' )
```

Found 436 images belonging to 2 classes.

#Applying ImageDataGenerator functionality to testset

```
x_test = test.flow_from_directory("/home/wsuser/work/Dataset/Dataset/test_set",
                                  target_size=(64,64),
                                  batch_size = 32,
                                  class_mode = 'binary' )
```

Found 121 images belonging to 2 classes.