**EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES**

MODEL BUILDING

**IMPORTING THE MODEL BUILDING LIBRARIES**

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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,rot ati on\_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/MyDriv e/ 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')