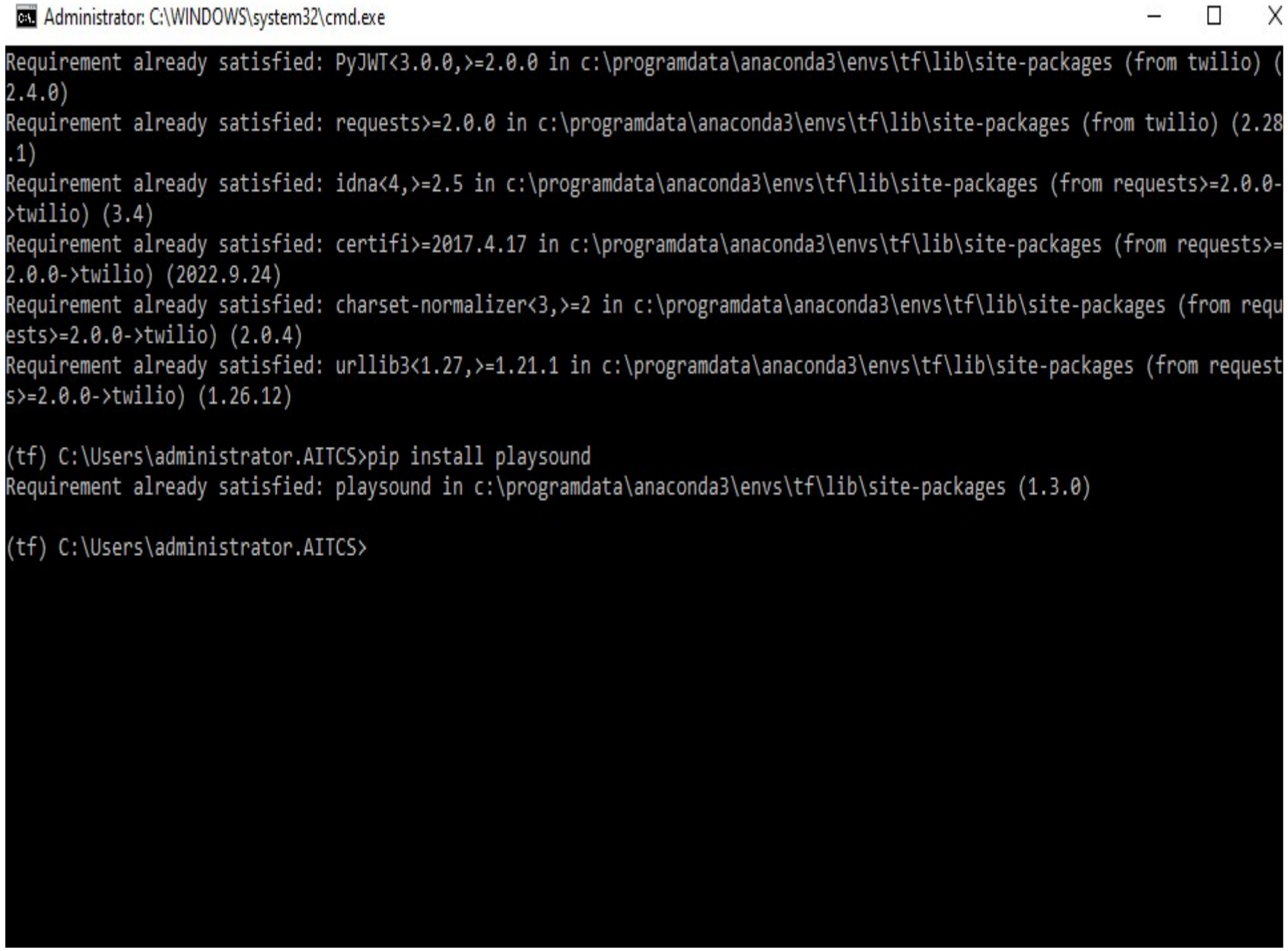

Administrator: C:\WINDOWS\system32\cmd.exe
Requirement already satisfied: PyJWT<3.0.0,>=2.0.0 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from twilio) (
2.4.0)
Requirement already satisfied: requests>=2.0.0 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from twilio) (2.28
.1)
Requirement already satisfied: idna<4,>=2.5 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from requests>=2.0.0-
>twilio) (3.4)
Requirement already satisfied: certifi>=2017.4.17 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from requests>=
2.0.0->twilio) (2022.9.24)
Requirement already satisfied: charset-normalizer<3,>=2 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from requ
ests>=2.0.0->twilio) (2.0.4)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\programdata\anaconda3\envs\tf\lib\site-packages (from request
s>=2.0.0->twilio) (1.26.12)
(tf) C:\Users\administrator.AITCS>pip install playsound
Requirement already satisfied: playsound in c:\programdata\anaconda3\envs\tf\lib\site-packages (1.3.0)
(tf) C:\Users\administrator.AITCS>

est-fire/ | Main-project - Jupyter Notebook

localhost:8889/notebooks/Desktop/Forest-fire/Main-project.ipynb

Jupyter **Main-project** Last Checkpoint: Last Thursday at 4:39 PM (autosaved)

Logout

Edit View Insert Cell Kernel Help | Trusted | Python 3 (ipykernel)

Run | Code

Out[33]:
```
array([[0.]], dtype=float32)
```

In [34]:
```
#Video Analysis
```

In [35]:
```
#import opencv library
import cv2
```

In [36]:
```
#import numpy
import numpy as np
```

In [37]:
```
#import image and load_model function from keras
from keras.preprocessing import image
from keras.models import load_model
```

In [38]:
```
#import client from twilio API
from twilio.rest import Client
```

In [39]:
```
#import playsound package
from playsound import playsound
```

In [40]:
```
#load the saved model
model = load_model(r'forest1.h5')
```

In [41]:
```
#define video
video = cv2.VideoCapture(0)
```

In [56]:
```
#define the features
```

Desktop/Forest-fire/ | Main-project - Jupyter Notebook

localhost:8889/notebooks/Desktop/Forest-fire/Main-project.ipynb

jupyter **Main-project** Last Checkpoint: Last Thursday at 4:39 PM (autosaved)

Logout

File Edit View Insert Cell Kernel Help | Trusted | Python 3 (ipykernel)

Run | Code

In [39]:
```
#import playsound package
from playsound import playsound
```

In [40]:
```
#load the saved model
model = load_model(r'forest1.h5')
```

In [41]:
```
#define video
video = cv2.VideoCapture(0)
```

In [56]:
```
#define the features
name = ['forest','with fire']
```

In [63]:
```
account_sid='ACb518f2b9e433f46f9d7125653c47fede'
auth_token='ab2f53a296cadb2283eddcf7a8681752'
client=Client(account_sid,auth_token)
message=client.messages \
.create(
    body='forest fire is detected,stay alert',
#use twilio free number
    from_='+12537858940',
#to number
    to='+91 63695 36822')
print(message.sid)
print("Fire detected")
print("SMS Sent!")
```

```
SM664af15d6850eab0bff140e77d88a18b
Fire detected
SMS Sent!
```

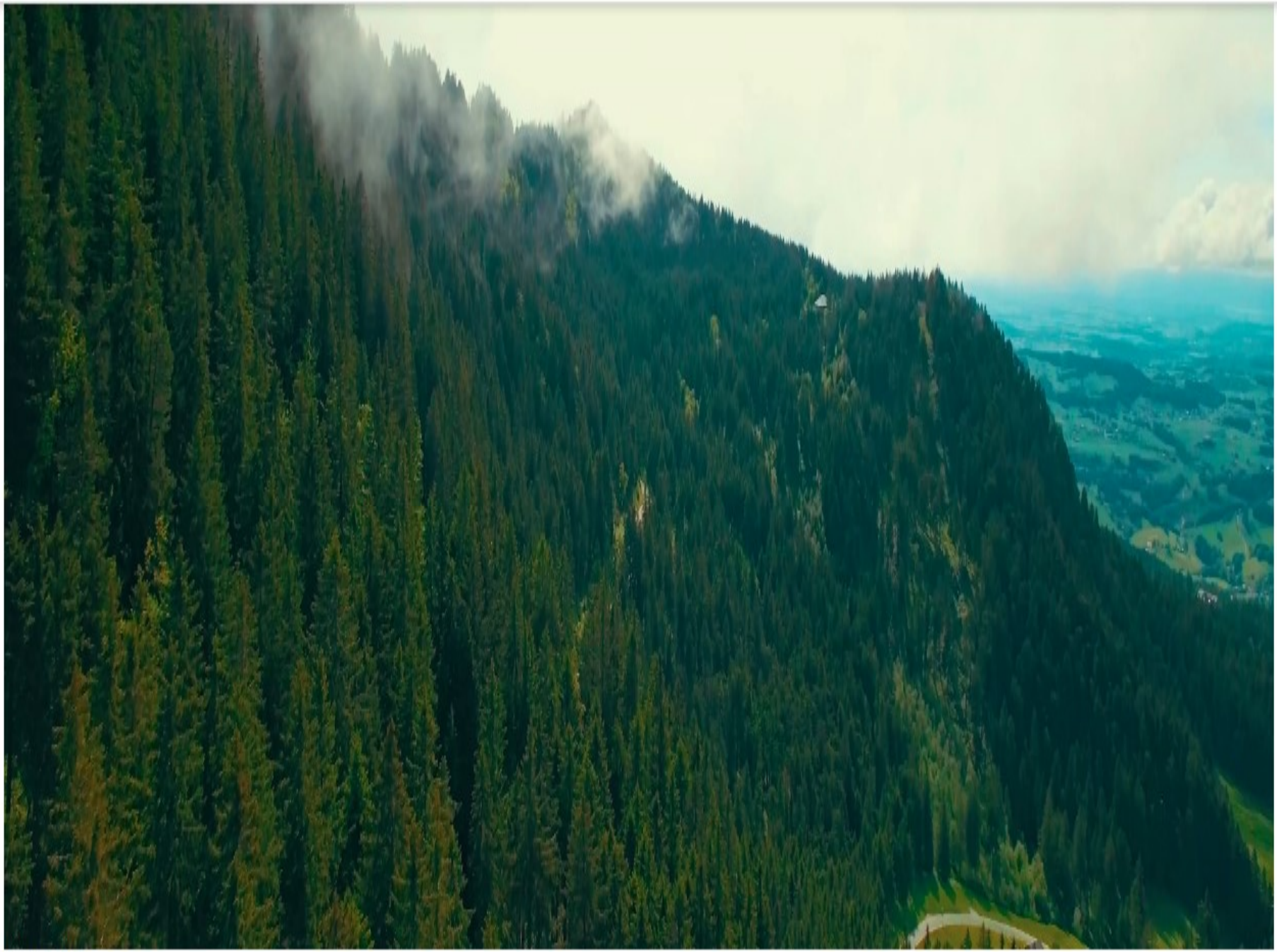
Type here to search

10:49
14-11-2022

```
import cv2
import numpy as np
from google.colab.patches import cv2_imshow
from matplotlib import pyplot as plt
import librosa
from tensorflow.keras.preprocessing import image
from keras.models import load_model
# Create a VideoCapture object and read from input file
# If the input is the camera, pass 0 instead of the video file name
cap = cv2.VideoCapture('/content/drive/MyDrive/project/forest.mp4')

# Check if camera opened successfully
if (cap.isOpened()== False):
  print("Error opening video stream or file")

# Read until video is completed
while(cap.isOpened()):
  # Capture frame-by-frame
  ret, frame = cap.read()
  if ret == True:
    x=image.img_to_array(frame)
    res=cv2.resize(x,dsize=(64,64),interpolation=cv2.INTER_CUBIC)
    #expand the image shape
    x=np.expand_dims(res,axis=0)
    model=load_model("/content/drive/MyDrive/project/Dataset/forest1.h5")
```

```
[64]    ret, frame = cap.read()
        if ret == True:
          x=image.img_to_array(frame)
          res=cv2.resize(x,dsize=(64,64),interpolation=cv2.INTER_CUBIC)
          #expand the image shape
          x=np.expand_dims(res,axis=0)
          model=load_model("/content/drive/MyDrive/project/Dataset/forest1.h5")
          cv2_imshow(frame)
          #pred=model.predict(x)
          #pred = int(pred[0][0])
          #pred
          int(pred)
          if pred==0:
            print('Forest fire')
            break
          else:
            print("no danger")
            break

    # When everything done, release the video capture object
    cap.release()

    # Closes all the frames
    cv2.destroyAllWindows()
```

[64]



Forest fire

```
[62] from twilio.rest import Client
     from playsound import playsound
     if pred==0:
       print('Forest fire')
       account_sid='ACb518f2b9e433f46f9d7125653c47fede'
       auth_token='ab2f53a296cadb2283eddcf7a8681752'
       client=Client(account_sid,auth_token)
       message=client.messages \
       .create(
           body='forest fire is detected,stay alert',
           #use twilio free number
           from_='+12537858940',
           #to number
           to='+91 63695 36822')
       print(message.sid)
       print("Fire detected")
       print("SMS Sent!")
     elif pred==1:
       print('No danger')
```

```
Forest fire
SM3401464ec1275c1db59663e7cdcb54ac
Fire detected
SMS Sent!
```