

VIDEO ANALYSIS

SENDING ALERT MESSAGEs

Date	12 November 2022
Team ID	PNT2022TMID23611
Project Name	Project -Emerging Methods for Early Detection of Forest Fires

In [1]:

```
import cv2
#import facevec
import numpy as np
import smtplib
from tensorflow.keras.utils import load_img, img_to_array
from keras.models import load_model
from twilio.rest import Client
```

In [3]:

```
model = load_model(r'forest2.h5')
video = cv2.VideoCapture(r"C:\Users\sanjay\Downloads\pexels-arnav-kainthola-7543653.mp4")
name = ['forest', 'with fire']
```

In [4]:

```
while(1):
    success, frame = video.read()
    cv2.imwrite("image.jpg",frame)
    img = load_img("image.jpg")
    x = img_to_array(img)
    res = cv2.resize(x, dsize=(128, 128), interpolation=cv2.INTER_CUBIC)
    x = np.expand_dims(res,axis=0)
    pred=model.predict(x)
    if(1>pred[0]):
        p=0
    else:
        p=1
    print(p)
    print(pred)
    # cv2.putText(frame, "predicted class = " +str(name[p]), (100,100), cv2.FONT_HERSHEY_SI

# pred=model.predict(x)
if pred[0]==1:
    account_sid = 'AC5923cf8d29ec11edffab37a3997f3602'
    auth_token = '70c0e846d5dd8a8c5ff747a1ceefc75c'
    client = Client(account_sid, auth_token)

    message = client.messages \
        .create(
            body='Forest Fire is detected, stay alert',
            from_='+14793363560',
            to='+918838487815')

    print(message.sid)

    print('Fire Detected')
    print ('SMS sent!')
    break
else:
    print("no danger")
    #break
cv2.imshow("image",frame)

if cv2.waitKey(1) & 0xFF == ord('a'):
    break

video.release()
cv2.destroyAllWindows()
```

1/1 [=====] - 0s 168ms/step

1

[[1.]]

SM000d50142829a6e02273fc7bbbd56f54

Fire Detected SMS sent!

In [5]:

```
img
```

Out[5]:



ALERT MESSAGE

4:45 PM / 4.5KB/s



503501

savings on top brands

UNiDAYS

1 9-26 3:24 PM

Hi Sanjay Your UNiDAYS student account is ready but expires soon. TAP: <https://itbl.co/cZB~KMs0a> to enjoy savings on top brands

1 9-27 2:08 PM

FINAL NOTICE Sanjay enjoy exclusive student discounts on many brands. Complete your UNiDAYS account. Tap here: <https://itbl.co/cZB~1gA0m> UNiDAYS

1 4:33 PM

Sent from your Twilio trial account - Forest Fire is detected, stay alert



Text message

1

