

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

## **VIDEO ANALYSIS**

### **OPENCV FOR VIDEO PROCESSING**

pip install twilio

Looking in indexes: <https://pypi.org/simple>, <https://us-python.pkg.dev/colab-wheels/public/simple/>

Requirement already satisfied: twilio in

/usr/local/lib/python3.7/dist-packages (7.15.1)

Requirement already satisfied: pytz in /usr/local/lib/python3.7/dist-packages (from twilio) (2022.5)

Requirement already satisfied: requests>=2.0.0 in

/usr/local/lib/python3.7/dist-packages (from twilio) (2.23.0) Requirement already satisfied: PyJWT<3.0.0,>=2.0.0 in

/usr/local/lib/python3.7/dist-packages (from twilio) (2.6.0) Requirement already  
satisfied: urllib3!=1.25.0,!1.25.1,<1.26,>=1.21.1 in  
/usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (1.24.3)  
Requirement already satisfied: certifi>=2017.4.17 in  
/usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio)

(2022.9.24)

Requirement already satisfied: idna<3,>=2.5 in

/usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (2.10)

Requirement already satisfied: chardet<4,>=3.0.2 in

/usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (3.0.4) pip

install playsound

Looking in indexes: <https://pypi.org/simple>, <https://us-python.pkg.dev/colab-wheels/public/simple/>

Requirement already satisfied: playsound in

/usr/local/lib/python3.7/dist-packages (1.3.0)

*#import opencv library*

import cv2 *#import*

*numpy* import numpy

as np

*#import image function from keras* from keras.preprocessing import image

*#import load\_model from keras*

from keras.models import load\_model

*#import client from twilio API* from twilio.rest import

Client *#import playsound package*

from playsound import playsound

WARNING:playsound:playsound is relying on another python subprocess. Please use `pip install pygobject` if you want playsound to run more efficiently.

*#load the saved model* model=load\_model("forest1.h5")

*#define video* video=cv2.VideoCapture(0) *#define the features*

name=['forest','with fire']