**Recording on Raspberry Pi for 12 hours using OpenCV**

from picamera.array import PiRGBArray

from picamera import PiCamera

import time

from datetime import datetime

import cv2

*#Define camera and specify parameters*

camera = PiCamera ()

camera.resolution = (640,480)

camera.framerate = 15

rawCapture = PiRGBArray (camera, size=(640,480))

time.sleep(0.1)

def get\_output(out=None) :

if out:

out.release()

#*Specify where to save the video, the name of the video, and add date and time to file name.*

return cv2.VideoWriter('/home/pi/Videos/IDage' + str(time.strftime('%m %d %Y %H %M %S')) + '.avi', cv2.VideoWriter\_fourcc(\*'MJPG'), 15, (640,480))

*# Define variables*

next\_time = time.time() + 60\*60

out = get\_output()

start\_time = time.time()

for frame in camera.capture\_continuous(rawCapture, format="bgr", use\_video\_port=True) :

now = datetime.now()

*#Start a new file when the time exceeds one hour (60 sec \* 60 min)*

if time.time() > next\_time:

next\_time += 60\*60

out = get\_output(out)

image = frame.array

*#If the current time is more than 12 hours after the start time, stop recording*

if time.time() > start\_time + 60\*60\*12: break

*#Display the date and time on the video*

frame = cv2.putText(image, str(now.strftime("%m/%d/%Y %H:%M:%S")),

(10, 100), cv2.FONT\_HERSHEY\_SIMPLEX, 1, (210, 155, 155), 4, cv2.LINE\_8)

out.write(frame)

cv2.imshow("Frame", image)

key = cv2.waitKey(1) & 0xFF

rawCapture.truncate(0)

if key == ord("q"):

break