**Preprocessing Code:**

Video to frames extraction:

import cv2

import os

def extract\_frames(video\_path, output\_dir, frame\_interval=20):

if not os.path.exists(output\_dir):

os.makedir(output\_dir)

video = cv2.VideoCapture(video\_path)

success, image = video.read()

count = 0

while success:

if count % frame\_interval == 0:

cv2.imwrite(os.path.join(output\_dir,f”frame(count).jpg”), image) #save frame as JPEG file

success, image = video.read()

count += 1

video.release()

#Directory containing all the videos

video\_directory = “/Users/avikalchauhan/Downloads/archive/side\_view”

#Directory where the frames will be saved

frame\_directory = “/Users/avikalchauhan/Downloads/image”

#List all the files in video directory

videos = os.listdir(video\_directory)

#Filter out only mp4 files if there are other types of files

Videos = [video for video in videos if video.endswith(‘.mp4’

# Process each video

for video in videos:

video\_path = os.path.join(video\_directory, video)

output\_dir = os.path.join(frame\_directory, “frames” + video[:-4])

#create separate folder for each video

extract\_frames(video\_path, output\_dir)