PEDESTRIAN DETECTION

USING OPEN-CV2 MOG2 BACKGROUND SUBTRACTOR

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STEP 1:
DETERMAIN AREA OF INTEREST FOR OBJECT COUNTING

STEP 2:
INITIALISE MOG2 BACKGROUND SUBTRACOTR AND APPLY TO VIDEO FRAME

STEP 3:
PREPROCESS IMAGE TO REMOVE BACKGROUND NOISE

STEP 4:
USE OPENCV METHODS TO FIND CONTOURS AND THEIR PARAMETERS

STEP 5:
DETECT MOVING CONTOURS BY COMPARING CONTOUR DISTANCES FRAME BY FRAME

STEP 6:
FILTER OUT MOVING OBJECTS THAT DO NOT ENTER THE AREA OF INTEREST AND ARE DETECTED AS NOISE

RESULTS:

BASED ON THE GIVEN RESULTS AND FIRST HAND ANALYSIS OF REAL TIME DETECTION ON THE GIVEN DATA SET OV VIDEOS I HAVE CONCLUDAED THAT THE CURRENT OBJECT DETECTION BASED ON MOG2 BG SUBTRACTOR AND IMAGE PREPROCESSING IS LAKING IN AREAS OF DISTINGUSHING INDIVIDUALS IN GROUPS AS WELL AS MAINTAINING CONSISTANCY IN OBJECT MOTION IN FRAME BY FRAME PROCESSING THUS SOMETIMES ADDING TO THE NUMBER OF DETECTED PEDESTRIANS