



# Contour based People Counting

USING OPENCV

By: Aasish Tammana , Abhijith B N  
Digital Image Processing Project  
23-11-2018

## Objective:

->Contour based counting algorithm to count the number of people passing through the camera's field of view.

## Software used:

OpenCV 3.4.3

Python 3.6.1

Image processing Operations:

->Image acquisition and Video Capture through frames

The function **cv2.imread()** is used to read an image. Similarly the function **cv2.imshow()** is used to display an image read in a window.

'frames code'

To capture a video, you need to create a **VideoCapture** object. Its argument would include the name of the video file.

'videp capture code'

->Reference line positions on the captured frames

->RGB image to gray scale image

->Gaussian Blur

->Binary thresholding

->Morphological operations like Dilation and Erosion

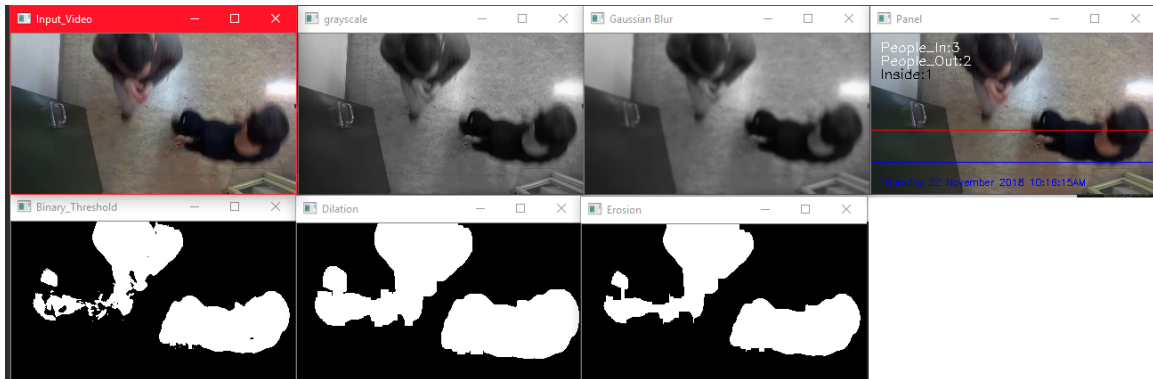
-> Detect Contour and Draw Contour

->Convexhull

->Object tracking using contours

->Output Formatting

->Display windows



Thanking You