During the experiments we discovered that people which wear black clothes are very similar on color histograms. The only distinguishable feature between them is head color. One of them has black hairs and the other one has blonde/red hairs. But the problem here is that hairs of blonde person are very similar to the light color of the background. That is why if one of person’s blobs captures too much background then both people in black have fair amount of black and yellow/green colors in their distribution and people in black become literally indistinguishable. We have thought about two approaches to tackle this issue. One is the usage of positional information. Because people are viewed from above they appear as concentric circles, with one bigger/outer circle representing people clothes and inner one responsible for person head. However, the problem with this approach is that people are not perfect circles and it is hard to get stable offset of the head. That is why we used another technique which can be called hierarchal background subtraction which allows iteratively get better people contours without risking of reducing them to nothingness. In this technique once we get our initial blobs we know that there is very high chance that the people are there and they have these background contour around them due to imperfection our image cleaning persons. Relying on this information about person presence in the blob we subtract background once more in order to remove background contour. The attained result can be very sparse and small that is why we fill resulting pixels with convex shape using built-in Matlab bwconvhull function. If nevertheless resulting area becomes smaller than certain threshold than we just cancel this operation. The last step allows to preserve enough are in extreme case (for example, the guy with white clothes often almost disappears due to the second background subtraction but this step preserves him).