A simple detector for crowd counting using OpenCV and Python

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Procedure

- Import images as black and white.
- Apply Adaptative Histogram equalization to the images.
- Substract the background to the images using the image with the background.
- Apply an erosion algorithm to obtain small highlighted areas.
- Apply a thresholding algorithm to binarize the image.
- Apply a dilation operation into the binarized images to expand the whites.
- Use a contour algorithm to extract the different regions containing persons.
- Obtain the bounding boxes from these regions.
- Ocunt them and compare the number of detections to the real cuantity.



Background Removal

CLIHE