
```
close all;
im = imread('bottles.tif');

%convert to binary image
bw = im2bw(im,0.7);

%find connected components
cc = bwconncomp(bw);

%find number of pixels in ccs
numPixels = cellfun(@numel,cc.PixelIdxList);

%sort blobs based on size
[sortedPix, index] = sort(numPixels, 'descend');

%find large blobs
numBottles = size(find(sortedPix > 1000),2);

%average of empty regions around bottles
correctAr = sum(sortedPix(1:numBottles))/numBottles;

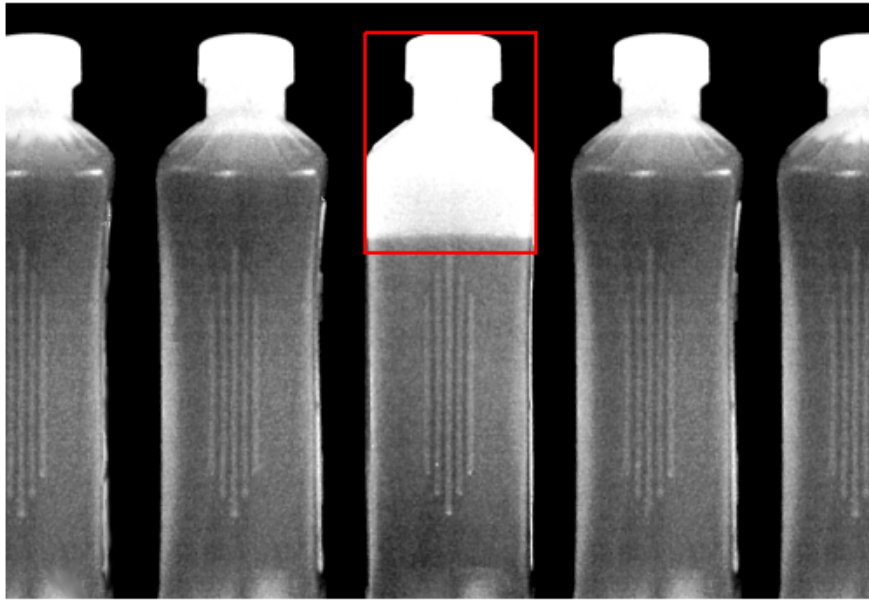
%find bounding box coordinates around the blobs
ms = regionprops(cc, 'BoundingBox');
ms = ms(index);

figure;
imshow(im);
drawnow;
hold on;

for blobNumber = 1:length(ms)
    %rectangle('Position', ms(1).BoundingBox, 'EdgeColor', 'r', 'LineWidth', 2
    if sortedPix(blobNumber) > correctAr
        rectangle('Position', ms(blobNumber).BoundingBox, 'EdgeColor', 'r', 'L
    else
        break;
    end
end
hold off;
```

ans =

7



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