Subject: one more question on object classification _or_ local/adaptive thresholding
Posted by dmartin on Wed, 17 Apr 2002 16:42:33 GMT
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I am trying to find objects in a 2-D picture. By find I preferably mean create a binary image of the objects with which I can use label_region(). Individually, they have approximately uniform intensity on a brighter background. However, the illumination varies widely across the image. Some boring details: the images are 640x480, and the objects are 20-100 pixels in diameter, and are not necessarily round, or even close, and are separated by 5-100 pixels.

I have the feeling that some sort of adaptive thresholding is what I need, but I am not sure of an efficient way of implementing it (I'm working with tens of thousands of these images).

Right now, I am working with smoothing over the images, and subtracting this effective background - but this leads to holes and bright spots (see a few posts ago), which I cannot remove efficiently (erosion/dilation often joins the objects together).

Would anyone be willing to share a solution to either the overall problem or the local thresholding problem?

Thanks a million,

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PS: I am trying to get this to work in both high and low contrast situations. I haven't had much luck with simplistic edge finding (Sobel), but perhaps there is an intelligent form that would work better?