Subject: Re: Classification of objects in 2D image
Posted by hahn on Fri, 15 Dec 2000 14:24:51 GMT
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Ben Tupper <pemaquidriver@tidewater.net> wrote:

> Hello,
>
> Could you describe the images you have in hand? I have a
> number of thought, but it helps to know where your staring
> point is.

The images are greyscale images of crystals viewed under
a microscope. This is an attempt to classify the quality
of food by dissolving some salt in milk and evaporating
the liquid. Other components are removed too until the
salt crystals are left over.
>
> Here are some questions that might determine the approach
> you take:
> -Are the images of 'natural' samples with lots of
> detritus/junk floating around?

There is little junk floating around when the experiment
is correctly done.

> -Is the background uniform or varying?

The background is uniform in a single picture but varies
from picture to picture. The threshold has to be adjusted
for each picture, but that seems to be manageable.

> -Are the features detectable with a simple threshold
> applied to the entire image, or do you need to consider
> regional thresholding?

A simple threshold for the entire image should be sufficient.

> -Do you have only one image per field of view or do you
> have multiple images for each field of view?

There is only one image per sample of the fluid under test.

One of the major problems is that the crystals have a
varying orientation from picture to picture. Other
properties such a shape, size and clustering vary little
within one class. So variations of shape, size and
clusterings should be detected and grouped into various

classes.

Norbert