
Subject: Re: find rotation between two images

Posted by [R.G. Stockwell](#) on Thu, 02 Sep 2004 01:01:22 GMT

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"Tobi" <tbeetz@yahoo.com> wrote in message

news:7f0cc27.0409011354.45cce42f@posting.google.com...

> i have several images where i would like to find the rotation and
> shift compared to a reference image. i use an alignment routine to
> seperate the shifting part. however, there is still the remaining
> problem of image rotation. is there a routine available? thanks!

Cool problem! Ignoring scale (zoom) problems and assuming the shift of the center of rotation is in the middle (since you did the shift already), to find a rotation between images I'd

- 1) clip the corners (since they presumably will not show up in the rotated image) leaving a circular image.
- 2) find the edges using a canned routine (with a high threshold) for both
- 3) then calculate the Radon transform of the edge image for both.
- 4) read off the angle of particular lines for both, and subtract the two

Cheers,
bob
