

Re: registration of spherical images

Source: <http://sci.tech-archive.net/Archive/sci.image.processing/2008-04/msg00143.html>

- *From:* ImageAnalyst <imageanalyst@xxxxxxxxxxxxxxxx>
 - *Date:* Wed, 30 Apr 2008 12:34:26 -0700 (PDT)
-

On Apr 30, 1:43 pm, damo suzuki <liquidt...@xxxxxxxx> wrote:

On Apr 30, 3:31 pm, ImageAnalyst <imageanal...@xxxxxxxx> wrote:

On Apr 30, 5:21 am, damo suzuki <liquidt...@xxxxxxxx> wrote:

Are there techniques to register spherical images? Panning and tilting of the original images would actually correspond to simple shifts on the sphere, but what about roll?

damo:

Is it really a sphere, like you're trying to align two maps on a globe?

I'm not sure how to do it but I remember seeing these and perhaps a Mobius transformation or the Reimann sphere concept might be a lead that might help you.

http://en.wikipedia.org/wiki/M%C3%B6bius_transformation

Here's a really cool video that shows how you can take a spherical image and map it to a plane:

Re: registration of spherical images

<http://www.youtube.com/watch?v=JX3VmDgiFnY>

The full version and more explanation is available at the professor's web site: <http://www.ima.umn.edu/~arnold/moebius/>

Then, once your spherical images have been mapped to the plane, maybe you can align the images in the plane using more