Subject: Re: Find shift and rotation between two images.
Posted by Vince Hradil on Sun, 15 Feb 2009 02:50:24 GMT

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On Feb 14, 8:22 pm, kBob <KRD...@gmail.com> wrote:
> frankosuna wrote:
>> Is there code out there to figure out by how many pixels an image is
>> shifted from it's original as well as the angle?
>
>   Image registration (shift and rotation) is a popular subject on this
> newsgroup. Have you looked for previous post on this topic in idl-
> pvwave?
>
>   I found these two papers to be very helpful when I was investigating
> image registration techniques dealing with FFT using IDL to find shift
> and rotation.
>
>   An IDL/ENVI implementation of the FFT-based algorithm for automatic
> image registration
>   By Hongjie Xie
>
>   and
>
>   Understanding FFT- based algorithm to calculate image displacements
> with IDL programming language
>   By Cynthia Rodriguez, University of Texas at San Antonio
>
>   There is a Word DOC of Xie's paper at UTEP ...
>
>   http://research.utep.edu/Default.aspx?PageContentMode=1& tabid=30376
>
>   However, my favorite IDL image registration process are the auto
> alignment IDL routines by T. Metcalf that are found at SOHO. He
> doesn't use FFT's, but implements cross correlation techniques that
> work very well to find shift and rotation between images.
>
> Kelly Dean
> Fort Collins, CO

Wow - now there's a post chock full of info! Thanks Kelly!