Subject: Re: Find shift and rotation between two images.
Posted by KRDean on Sun, 15 Feb 2009 02:22:39 GMT

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.

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