Subject: Matching, Aligning, Affine Transform
Posted by azM on Thu, 18 Oct 2001 12:09:15 GMT
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Has anybody written a routine to match two images or even better volumes? At present I'm using a set of external programs (MIRIT, FSL-FLIRT both on UNIX) to calculate translation and rotation of a float volume versus a reference volume. The result is a 4x4 (affine) transformation matrix. (I posted some questions about this matrix earlier). I'm thinking about writting the whole routine myself because I'm not satisfied with the results of the UNIX programs. Unfortunatly I probably don't have enough time for my internship left to fully complete this. I want to base it on so called cost algorithems (Woods functions, Joint Entropy etc). Can anybody help me?

Thanks in advance,
Bob
B.C.Hamans<<at>>student.tue.nl

Subject: Re: Matching, Aligning, Affine Transform
Posted by gogosgogos on Mon, 22 Oct 2001 20:06:24 GMT
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I run into this problem and realized the source code
available for IDL is minimal..

a few suggestions:

1. grab dll-to-lib programs and create static libraries and link them to idl
2. if you have to present the source code, go get the free C code
   of AIR and SPM and translate that into IDL.. (stupid thing but if
   your instructor is a dumbass, that should get you off the hook)..

golden rule: IDL is a nice program, but only if you accept
its limitations... one of them is big confusement when it comes
to 3d transforms and such... the new image processing toolbox
for matlab does this with a single command...

i will not upgrade to 5.5 for sure... it still is behind matlab..

flame me for my words, i like some activity in the chan =)

Subject: Re: Matching, Aligning, Affine Transform
Posted by Nigel Wade on Tue, 23 Oct 2001 08:57:59 GMT
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GB Smith wrote:

> golden rule: IDL is a nice program, but only if you accept
> its limitations... one of them is big confusement when it comes
> to 3d transforms and such... the new image processing toolbox
> for matlab does this with a single command...

But you are not comparing like products. The signal processing toolbox is not a part of core MATLAB. It is an additionally priced product and you have to pay extra maintenance to keep using it.

>
> i will not upgrade to 5.5 for sure... it still is behind matlab..

Really?
Please explain how the following demonstrates the superiority of MATLAB 6 over a quite old version of IDL:

```
                     < M A T L A B >
          Copyright 1984-2000 The MathWorks, Inc.
             Version 6.0.0.88 Release 12
                  Sep 21 2000

>>  i=int16(1);
>>  i=i+1;
??? Error using ==> +
Function '+' not defined for variables of class 'int16'.
>>  i
i =
     1
```

IDL Version 5.1.1 (IRIX mipseb). Research Systems, Inc.

```
IDL> i=fix(1)
IDL> i=i+1
IDL> print,i
       2
```

To me, any product which can't do a simple 1+1 is not worth considering for data processing.

>
> flame me for my words, i like some activity in the chan =)

Glad to oblige.

--

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