Subject: Re: IDL use to analyse MRI data
Posted by Nikki Bloms on Thu, 22 Jun 2006 15:19:27 GMT
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StevenM wrote:
> I am looking to trouble you for a little help. I am a novice and want
> to use IDL to analyse MRI data from a Bruker scanner. Can anyone point
> me in the direction of online literature that will help me to get
> started.
>
> thanks
>
> Steven

Steven,

Analyzing MRI data was my first major project with IDL also, beginning
with no programming knowledge. I'm still a beginner, but I think I may
help point you in the same direction I went through a short year or so
ago.

I would especially look at documentation relating to DICOM files - in
the Using IDL pdf, as well as the Image Processing in IDL pdf. The
online help is also a great tool, as long as you know what to look for.
(i.e., the IDLffDICOM object, READ_DICOM, QUERY_DICOM, etc.) David
Fanning's site also helped with a few basic common confusions.

If you get stuck, let me know and I'll try to help you along, too. As
of this point, I mostly create a program until it does what I need it
to, no matter how efficient it is (I know, not a good policy to follow
- but it works).

Others on this newsgroup might offer more professional advice, though.

Good Luck,
Nikki

Subject: Re: IDL use to analyse MRI data
Posted by Robbie on Fri, 23 Jun 2006 03:43:03 GMT
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Hello,

If you can't afford the DICOM network services module from ITT, then
you can always use DCMTK (www.dcmtk.org) executables. I've also have an
alternative implementation of IDLffDICOM which lets you access
uncompressed DICOM files using the ASSOC function

(http://www.barnett.id.au/idl/).

I would think that Oliver Thilmanns library
(http://www.jubileum.lu.se/mrphysics/software/lib/index.htm) might be
userful. You could also use iTools if you are sure that you only want
to design a few custom data filters.

In Nuclear Medicine, we often process scans using a druid (more
commonly known as a wizard). I have an implementation of this using a
workflow engine written entirely in IDL. It comes with common UI
controls such as rigid registration, curve fitting, ROIs, zoom, pan and
contrast. I probably won't release code until it's fairly stable, but I
am still keen share code with any potential collaborators in the
meantime. However, I don't know if it would be any use for MRI
processing.

Robbie

Subject: Re: IDL use to analyse MRI data
Posted by Andrew Cool on Sat, 24 Jun 2006 08:15:40 GMT
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StevenM wrote:
> I am looking to trouble you for a little help. I am a novice and want
> to use IDL to analyse MRI data from a Bruker scanner. Can anyone point
> me in the direction of online literature that will help me to get
> started.
>
> thanks
>
> Steven

Steven,

If you want a SOTS IDL MRI package (Scientific off-the-shelf...), then
Google on Terry Oakes and his SPAMALISE package, which will read in
just about every MRI format under the sun, and it does a lot of
processing for
you. Best of all, Terry will give you the source code if you ask... ;-)

Andrew