Subject: Re: MRI volume visulization
Posted by David Foster on Fri, 25 Apr 1997 07:00:00 GMT
View Forum Message <> Reply to Message

David Fanning wrote:
>
> S. Partovi writes:
>
>> i admit to being a novice.
>
> Oh, no. Here comes trouble. :-)
>
>> i am trying to visualize 92 MR brain slices as a volume (eg. surface
>> map) on a pentium pro, running NT 4.0, and IDL 4.x
>>
>> the catch is, i am hoping (dreaming?) that i can rotate the volume
>> interactively, or near-interactively. any ideas if this is possible?
>> even just a yes / no would be appreciated so i don't waste time (or
>> waste newgroup space).
>
> I can tell I am getting old when it is the yes or no questions that
> give me the most trouble!
>
> Well, Dr. Partovi, it *depends*. Do you mean rotate it with two
> or three degrees of freedom, backwards and forwards, like the
> spinning tea cups in AVS? Then, no, probably not. Especially
> with IDL 4. And not as a novice. :-)
>
> <snip>

Dr. Partovi -

I would say your best bet without doing any programming would be to
try out the SLICER program that comes with IDL. The interface is not
very intuitive, and the documentation even worse, but you can get
poor-to-fair volume visualization for MRI, especially if your
resolution is good (and 92 slices is pretty good). But the speed is
not impressive, definitely too slow for real-time rotations. IDL 5.0
on our Sun Ultra, which has the OpenGL accelerated graphics that this
version is supposed to take advantage of, was not much of an
improvement over 4.0.1 .

If you want to play around, I would suggest starting with the Slicer
program, or David Fanning's Slice program (http://www.dfanning.com).
To sum it up, 3D rendering in IDL is a bit of a disappointment, at
least for this application.

Dave

--

~~~~~~ ~~~~~~
 David S. Foster   Univ. of California, San Diego
  Programmer/Analyst   Brain Image Analysis Laboratory
 foster@bial1.ucsd.edu Department of Psychiatry
  (619) 622-5892   8950 Via La Jolla Drive, Suite 2200
                 La Jolla, CA 92037
                 [UCSD Mail Code 0949]
~~~~~~ ~~~~~~