
Subject: IDL virtual reality (was 3D Object IDL)
Posted by [george](#) on Wed, 08 Aug 2001 08:52:45 GMT
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Hi There,

Thanks for your input. Actually I am well acquainted with the "flicker glasses" technique. I have done a fair amount of 3d animation and used both the "flicker glasses", and twin polarised projectors, as the virtual reality technique. However, up till now my method has been to render 2 separate animations in IDL (one for left, one for right) and then recombine these in special 3D video software to create the final virtual reality scene. This works fine - but is completely "offline".

So, my question here is how to do this in fully interactive mode. I am not thinking here about the actual 3D technique ("flicker glasses etc.") as much as how to achieve this within IDL. My question really is: What is the most efficient way to write 2 separate scenes (L and R) at the same time. I.E., are there any techniques in IDL that make this a "no brainer" - has anyone done this before ? I am really looking for technical IDL input. Do you write the data to the Z-buffer and alternate between the 2 scenes in real time (as fast as the render engine will do it) etc. etc. ?

Any help much appreciated.

Cheers ,

George Millward

"Rick Towler" <rtowler@u.washington.edu> wrote in message
news:<9kp8m8\$16n2\$1@nntp6.u.washington.edu>...

> You might want to look into 3d shutter glasses. They work by alternately
> rendering a left and right eye view to the screen while simultaneously
> covering the opposite eye by darkening the lens. All of this is done at the
> driver level so you don't have to render your two views by hand.
>
> I would start with a consumer level product. Both Elsa (glasses are called
> Revelator) and Asus (glasses are called VR Spectacle) make glasses that work
> with some of their graphics cards for the PC. The glasses tend to be a
> little flimsy and aren't the most comfortable but they are cheap and a good
> place to start with this sort of thing. They do work quite well but I know
> some people that get headaches or sick to their stomachs using them.
>
> If you decide that shutter glasses are the way to go, you can start looking
> for a more professional product. I know they exist but I just haven't
> gotten that far.
>
> good luck!
>
> -Rick Towler

>
>
> "George Millward" <ghm@appleonline.net> wrote in message
> news:B795A847.14F%ghm@appleonline.net...
>> Hi there,
>>
>> I am wanting to generate full 3D output from IDL object scenes. I can do
>> this offline (i.e., create two different views in which the "eye" is
> offset
>> for left and right view). But I want to be able to do all this fully
>> interactively.
>> So my setup would be:
>> Computer running IDL - output to (maybe) 2 graphics cards - > 2 projectors
>> (with polarised filters) and then viewed using 3D (polarised glasses).
>>
>> In practice therefore I need a system for outputting 2 slightly different
>> images (left and right) of the same scene.
>> Does anyone know how to do this ? Are 2 graphics cards required or can it
> be
>> done with one ?
>>
>> Thanks in advance for any help.
>>
>> George Millward.
>>
