
Subject: Re: range ordering of triangular facets
Posted by [Karl Schultz](#) on Wed, 26 May 2004 14:37:06 GMT
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"Neil" <nasalmon@onetel.net.uk> wrote in message
news:74039481.0405251329.69e88002@posting.google.com...
> Does anyone have any idea how i can obtain a routine that will range
> order a series of triangular facets, such that each triangle can be
> rendered to appear on top of predecesing ones, without triangles
> appearing out of order? The assumption of course is that no triangles
> cross, but they can of course share common pairs of vertices?
>
> Unfortunatley, simple range ordering the facets according to the mean
> of the distance to the viewer doesnt always work, particularly for
> long triangles. This is annoying when rendering, as some triangles
> that should be on top lie underneath, leading to an imperfect image.
> This must be the bread and butter of some mathematicians, but it's
> certainly got me fooled.

An analytical solution is the Binary Space Partition tree. There is a
sample implementation in Graphics Gems.

If all you want to do is render these triangles, then Object Graphics or the
Direct Graphics 'Z' device will render them correctly using a depth buffer.

Karl
