David,
   You're quite right. I think I've just got used to IDLE being able to 99%
of the things I ask of it. I have made some progress if anyone is
interested. Its not pretty though. I've produced a connectivity array which
contains all the possible combinations of points to produce a myriad of
triangles (28000 ish polygons). Then searched through and removed all the
duplicates taking the total down to 4000 ish. Using mesh_decimate and
mesh_validate (I'm 100% sure what these do) I've then decreased the number
to 1000 odd. Obviously there are still many I don't need but nonetheless
this is low enough for my computer to handle the object easily and thus for
me to do most things that I need.
   My final problem is that some exterior triangles are facing the wrong
way. I think it may have something to do with the directions of the normals
at the vertices but that will have to wait until tomorrow. If anyone has any
ideas please let me know. I'm spending FAR to much time on this.

All the best

Adam

"David Fanning" <david@dfanning.com> wrote in message
news:MPG.19d2394dd3d391e89896ed@news.frii.com...
> Adam Rees writes:
>
>> I'm trying to do something that I thought IDL would handle easily but
I'm
>> having real difficulties. I have a set of irregular 3D points (NB: no
values
>> at those points). I simply want to produce a 3D volume, most likely a
series
>> of polygons/triangles that this set of points defines. I've been using
the
>> idlgrpolygon command at present but am having trouble with the
connectivity
>> since the points are irregular, i.e. all the vertices are in the right
>> places but the faces are all over the place. Does anyone have any ideas
>> because I'm stumped?
>
> It's always interesting to me what people consider
> to be "easy" problems. But "here are a bunch of
> 3D points with no seeming relationship to one another,
> so I want you to connect them up into something I might
> recognize" seems pretty hard to me. :-)
>

> I mean if you have 100 points, there must be nearly
> !100 ways to do it wrong!
>
> Cheers,
>
> David
>
> --
> David W. Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Phone: 970-221-0438, E-mail: david@dfanning.com
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Toll-Free IDL Book Orders: 1-888-461-0155