Subject: Re: Finding the intersection of 2 short lines
Posted by jimmybobs on Mon, 13 Feb 2012 15:51:31 GMT
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On Feb 13, 12:48 pm, "ben.bighair" <ben.bigh...@gmail.com> wrote:
> On Feb 13, 5:39 am, Jimmy <jimmyb...@gmail.com> wrote:
>
>> Hi everyone.
>
>> I'm trying to find a way of detecting the crossing point of two short
>> lines (as part of a larger problem with detecting overlapping
>> polygons). I've used intersect.pro which gives me the general
>> intersect, but then I have to use the mother of all ugly if statements
>> (which I'm having trouble getting working) to detect whether the
>> intersect is actually on my short lines or extended away somewhere
>> else.
>
>> Is there a more elegant way of doing this? The code needs to find
>> whether the two lines cross, and return the intersection point.
>
> Hi,
>
> I have often used Paul Bourke's geometry webpages as a good starting
> point, like this one for line intersections (2d)...
>
> http://paulbourke.net/geometry/lineline2d/
>
> I used that stuff to develop these (you'll need David Fanning's cg*
> routines)
>
> http://dl.dropbox.com/u/8433654/pbourke_lines.zip
>
> Cheers,
> Ben

Hi,

My original reply seems to have been eaten. Your PB_LINES_INTERSECTION routine worked like a charm, thank you.

I had read that page you linked to, but had missed the vita line at the bottom : "The equations apply to lines, if the intersection of line segments is required then it is only necessary to test if ua and ub lie between 0 and 1. Whichever one lies within that range then the corresponding line segment contains the intersection point. If both lie within the range of 0 to 1 then the intersection point is within both line segments. "

Thanks,

Jimmy