Subject: Re: Least Cost Path using Dijkstra's Algorithm
Posted by David Fanning on Thu, 21 Oct 2010 13:24:11 GMT
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Bill writes:

> I would like to take a raster, which represents the "cost" of moving
> through that pixel, and find the shortest path (i.e. least cost path)
> through that raster. For example, using geospatial analysis and
> several layers of data, this can often be used to model cross country
> mobility with each raster cell represent the ease or difficulty of
> moving through that cell.
>
> Has any written an IDL program that does a least cost path from a
> starting cell to an ending cell using Dijkstra's Algorithm?
> http://en.wikipedia.org/wiki/Dijkstra's_algorithm
>
> It's a simple concept but can be very memory intensive depending on
> the size of your raster, in my case could easily be 20,000 samples by
> 20,000 lines.
>
> Thanks for your help. I am new to IDL so was looking for a jump start.

And you are choosing IDL to do this for what reason?

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Least Cost Path using Dijkstra's Algorithm
Posted by Bill[1] on Fri, 22 Oct 2010 10:38:41 GMT
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Hopefully, speed. Is there a reason why I shouldn't?

Currently, this is something typically accomplished with a GIS
package, such as ArcGIS. Hopefully, sometimes these processes are
painfully slower than they need to be. I work with a colleague that
did this in MatLab. I would like to go it with IDL, so I can

integrate this into ArcGIS.