Subject: Re: Quasi-freehand curve fitting...
Posted by ez95 on Mon, 09 Mar 1998 08:00:00 GMT
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It looks like

y=a Arctan (bx+c) +d

In article <6e0mdb$4s0@scotsman.ed.ac.uk>,
R.Brockie@roe.ac.uk wrote:
>
> Hello folks,
>
> This is something which has been exercising my mind for a little while
> now. My problem is the following:
>
> I have pairs of numbers (x,y) which rescribe the performance of a
> system, usually with a fairly abrupt change of gradient. eg:
>
> | x x x
> | x
> y| x
> | x
> | x x x x
> ----------
> x
>
> Now, this preformance does not have any particular functional form,
> but I would like to draw a curve through the points to draw the
> eye. The closest I have got to what I wish is to use INTERPOL to
> linearly interpolate between the points and then SMOOTH to round the
> corners. However, getting a nice amount of smoothing drags the curve
> away from the points. I would like a nice smooth curve which does go
> through all the points, like one would draw freehand.
>
> --
> R.
>
> -=-
> Richard Brockie B.Sc.(Hons), The tall blond one.
> Adaptive Optics Chap. Email: R.Brockie@roe.ac.uk
> -=-=-=-=-=-=-=-=-=-=-= http://www.roe.ac.uk/rmbwww =-=-=-=-=-=-=-=-=-=-=-
>

-----== Posted via Deja News, The Leader in Internet Discussion ==-----

Subject: Re: Quasi-freehand curve fitting...
Posted by steinhh on Mon, 09 Mar 1998 08:00:00 GMT
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Richard Brockie (rmb@muckleroe.roe.ac.uk) wrote:
> Thanks to Jim Pendleton <jimp@rsinc.com>, who suggested the SPLINE
> routine. I have ended up using SPL_INIT and SPL_INTERP as SPLINE has a
> few limitations, the main being that it requires monotonically
> increasing x-values which I do not necessarily have.

```
IDL> ix = sort(x)
IDL> x = x(ix)
IDL> y = y(ix)
```

Now you do :-)

Stein Vidar

Subject: Re: Quasi-freehand curve fitting...
Posted by rmb on Mon, 09 Mar 1998 08:00:00 GMT
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I, Richard Brockie (rmb@muckleroe.roe.ac.uk) wrote:
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: linearly interpolate between the points and then SMOOTH to round the
: corners. However, getting a nice amount of smoothing drags the curve
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-= -=-=-=-=-=-=-=-
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