## Subject: Re: Reducing a set of curves to a mean curve Posted by rogass on Mon, 04 Jan 2010 19:02:59 GMT

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On 4 Jan., 16:59, Bernhard Reinhardt <wirdseltengele...@freisingnet.de> wrote:

> Hi everyone,

>

- > I have a set of curves (as x-y-points) which I'd like to reduce to a
- > mean curve and some kind of deviation interval. If the curves would
- > consist of fixed x-values with varying y-values this would be no big
- > deal since I could compute the mean and a deviation measure at every
- > x-value. However it turns out that the x-values are not fixed as well.

>

- > My first idea was to use poly\_fit but the results don't look like I want
- > them to and it doesn't solve my problem with the deviation interval.
- > Right now I'm thinking of using a fixed x-grid and interpolating the
- > data. But before I reinvent the wheel again I want to ask if someone
- > here has appropriate code in his library. I think this should be a
- > common problem!?

>

> Best regrads!

>

> Bernhard

Hi.

SPLINE\_PP or SVDFIT may solve your problems. You might also reform your x-data into one big data set and also the y-data (take the sort index from x) to enable a broader set of fitting approaches.

Viel Glueck

CR

Subject: Re: Reducing a set of curves to a mean curve Posted by Vince Hradil on Mon, 04 Jan 2010 21:03:56 GMT View Forum Message <> Reply to Message

On Jan 4, 9:59 am, Bernhard Reinhardt <wirdseltengele...@freisingnet.de> wrote:

- > Hi everyone,
- >
- > I have a set of curves (as x-y-points) which I'd like to reduce to a
- > mean curve and some kind of deviation interval. If the curves would
- > consist of fixed x-values with varying y-values this would be no big
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>

> Best regrads!

>

> Bernhard

Does this help: http://tinyurl.com/yz6hdx3

Subject: Re: Reducing a set of curves to a mean curve Posted by Bernhard Reinhardt on Tue, 05 Jan 2010 11:58:25 GMT View Forum Message <> Reply to Message

## Bernhard Reinhardt wrote:

> Hi everyone,

>

- > I have a set of curves (as x-y-points) which I'd like to reduce to a
- > mean curve and some kind of deviation interval. If the curves would
- > consist of fixed x-values with varying y-values this would be no big
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- > data. But before I reinvent the wheel again I want to ask if someone
- > here has appropriate code in his library. I think this should be a
- > common problem!?

Well, I did now linear interpolation to a fixed x-grid. Easier then I thought with INTERPOL.

Regards,

Bernhard