
Subject: Re: One ellipse to rule them all

Posted by [ianpaul.freeley](#) on Mon, 11 Feb 2008 23:06:54 GMT

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On Feb 11, 4:51 pm, David Fanning <n...@dfanning.com> wrote:

> ianpaul.free...@gmail.com writes:

>> I'm hoping someone has done this before and can help me out.

>

>> I have a bunch of x,y points, and I'd like to find the ellipse (with

>> minimum area) that encompasses all of them. Any thoughts?

>

> I can show you how to find an ellipse:

>

> http://www.dfanning.com/ip_tips/fit_ellipse.html

>

> To enclose all the points I would, uh, expand it

> slowly. :-)

>

> Cheers,

>

> David

>

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming (www.dfanning.com)

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

My gut tells me I should be able to do it analytically. I *think* the two points that have the largest separation should define the major axis and position angle. Then I just need to fit for the minor axis from the rest of the points, and the largest one is the winner.
