Subject: Re: One ellipse to rule them all
Posted by Brian Larsen on Tue, 12 Feb 2008 16:08:59 GMT
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> 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.

I agree with the thoughts of this posting. A little work with a pen can go a long way.

Personally I would
- start with the ellipse you define, and maybe enlarge it some to be sure.
- define a cost function for ameoba that adjusts the tilt angle, semi-minor and semi-major axis where the cost is the area of the ellipse and you can be sure it has all the points but the cost for not being huge.
- run it and see what you get

Of course standing on the shoulders of giants is better, so if any of the mentioned references are good (I didnt read them) then go that route.

Cheers,

Brian

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