Subject: Re: MINIMUM DISTANCE BETWEEN TWO CURVES
Posted by David Fenyes on Tue, 04 Jul 2000 07:00:00 GMT
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> a=f(x,y,z) and b=g(x,y,z), both a and b are separate curves. . . .

> Find the minimum distance between a and b. Give the coordinate where this

You are minimizing F(i)-G(j) = f(x(i),y(i),z(i))-g(x(j),y(j),z(j)), a func. of 2 params. There is no general method for accomplishing this for f and g unknown. It's been a while since I used IDL, but it uses Numerical Recipes, which has some minimization routines, including simplex (will gravitate to a local minimum) and simulated annealing (better chance of global minimum). I seem to recall some of these are in IDL.

I've seen some genetic programming algorithms on the web as well. Any good algorithm or operations research book should get you started.

David
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