Subject: Re: diagonal dominant
Posted by on Wed, 30 Jan 2013 23:13:01 GMT
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Den onsdagen den 30:e januari 2013 kl. 18:21:13 UTC+1 skrev Gompie:
> The solution of AX=B, I got from svd (suggested earlier) is noisy. (perhaps it is an approximation). So I now want to construct A so that idl can compute its determinant value (and its inverse precisely) and the solution is more robust(i.e condition number is better).

What do you mean by noisy?

In that previous thread (it's actually better if you continue your older thread if you are discussing the same problem) you said the equations system can be over determined but not under determined. How does that work if your matrix is square? Then you have as many equations as unknowns so how can it be over determined? It could be under determined if you have linear dependencies.

You also said "I have checked for duplicate rows and columns in A they have been removed", presumably with that routine you got from me. I can understand the removal of identical rows, at least if the corresponding element in the RHS vector is also a duplicate, because this corresponds to removing identical equations. But why would you want to remove identical columns? That corresponds to removing one of the unknowns, is that what you want to do?

As for the removal of duplicate equations, it is really unnecessary if you solve the system with SVD methods. SVD can handle linear dependencies and removing duplicate equations does not guarantee that your system is free from them anyway.