Subject: Re: Genetic algorithms and curve fitting Posted by Allard de Wit on Fri, 28 Mar 2003 16:10:37 GMT

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Rob Dimeo wrote:

- > Hi,
- >
- > Over the past few years I have been writing IDL programs to analyze
- > data by fitting to models using standard least-squares methods. The
- > problems that we face here, however, sometimes are not amenable to the
- > least-squares approach and, having multi-modal chi-squared surfaces,
- > could benefit from a more robust global optimization. I have been
- > working on a hybrid genetic algorithm/least squares function that
- > appears to work "pretty well" for model fitting.

- > Has anyone on this newsgroup you used GAs or GA hybrids for data
- > fitting? I am seeking someone with whom I can "compare notes" and
- > discuss what works well and what does not. I am happy to share this
- > code with anyone (especially if you're interested in helping me
- > improve it!)

>

>

- Many thanks in advance!
- > Rob
- > ------
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Hi Rob,

I do not have an extensive knowledge of GA techniques but for the relatively simple optimisation problems that I have used GA's for I used a so-called micro-GA which worked pretty well. I implemented the micro-GA in IDL code, you can find the code at www.xs4all.nl/~ajwwag/

As it this GA was my first attempt to write something in IDL using object-oriented programming, the programming style may be somewhat clumsy, any comments on the code (errors/fixes) are welcome. Maybe, it is usefull for you.

best regards,

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