

Re: random model

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Justin,

My GA algorithm is in fact searching for coefficients to fit a dataset. So what I'm looking a a way to generate functions / models that the GA could try to fit to.

Lets say I have n-variables. And m-terms that I would like to examine. Then I should come up with a polynomial that can be any combination of the "standard" operators (+, -, *, /, ^, sqrt, ln, exp). I dont intend to do anything dynamic, so no derivatives or anything.

I hope it clarifies things a bit.

Kind regards, Darius Blaszyk

"Justin Davis" <jkd3@duke.edu> schreef in bericht
news:Vo6_d.28933\$w14.848634@twister.southeast.rr.com...

>

> *"Darius Blaszyk" <dhkblaszyk@zeelandnet.nl> wrote in message*

> *news:77-dnUT_t_-cTqXfRVnyiw@zeelandnet.nl...*

> > *Hallo,*

> >

> > *I have a bit of an awkward question for you. I'm toying around with a GA*

> > *and*

> > *I would like to test it by applying several models. Unfourtunately the*

> > *search is rather fast and I have to enter each time a new model by hand.*

> > *So*

> > *I was thinking if there are algorithms present that could generate a*

> > *continuous model automatically, so I can feed it to the GA?*

> > *The model should incorporate all the standard operators and allow for an*

> > *undefined amount of parameters. Can this be done?*

> > *I would appreciate any links or pointers on how to procede from here.*

> >

> > *Kind regards, Darius Blaszyk*

>

> *It's not clear, at least to me, what you are modeling. However, if I'm*

> *guessing correctly, you're asking about an encoding, a model, over which the*

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- > *genetic algorithm works. For instance, one model of human populations would*
- > *include heights, weights, and skin color; you'd use the GA to come up with*
- > *the best combination of those characteristics. Another model might include*
- > *heights, weights, skin color, and waist measurement. Then again, I'm not*
- > *sure how "standard operators" fit into this, because the operators I'm*
- > *thinking of are inherent in the GA itself, whatever you're modeling; e.g.*
- > *the mutation operator is often a part of the GA itself, not the thing*
- you're*
- > *modeling.*
- >
- > *Could you be more specific about your problem, perhaps giving an example*
- of*
- > *the models you're using?*
- >
- >