

Re: "Matlab to Scilab for Dummies" anywhere?

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Joerg wrote:

Hello Joseph,

Anyone know of an
open-source clone of
Mathematica?
Or is that too much to hope
for... ;) ?

Don't know, but maybe Maxima
(<http://maxima.sourceforge.net/index.shtml>)
might fill the bill?

Ooh, I'll have to try that, thanks!

In school, we had Mathematica workstations in several of the
engineering computer labs. One of the more memorable tasks
I had a
workstation do was to solve a system of nonlinear equations
– about 100
of them (for sizing a distillation column).

An Actual sign of progress in the software world, In my father's day all
there was Fortran and linpack in batch (overnight). Not quite the
same.

Progress? Back at the university we had to program in Fortran on punch
cards. That was a heck of a lot easier than these "modern" math
programs. Much less learning curve.

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<snip>

I think the big difference (what I think is the bad guy, (or what i will harp on)) is/are symbol manipulators. I hate them, because they never work... i.e. I spent one to many times learning the syntax and typing in (either Mathematica or Maple,) a hard integral, symbolic linear algebra problem or anything. EVERY SINGLE TIME I could have done it better than the above mentioned symbol manipulators... I always got an answer that was way way more complicated (took 3–10 pages to display) than I eventually came up with myself (either by just using an integral table or just doing it by hand.) or i got something with a command prompt, saying ...>answer. it just couldn't do ANYTHING i wanted. I haven't used them in a while, (a few years) have they gotten any better?

My big argument against symbol manipulators is that if you want an answer that doesn't rely on a closed form solution... why not just do it numerically in the first place? (with more control over errors due to step size, method used for a DE etc.)

The only reason I like matlab, (other than I'm used to it) is its ability to save you several (many) lines of code, vs. something like C or FORTRAN, when your computing a numerical integral, or the solution or a linear or nonlinear(?) DE, or etc. it's also quite good for DSP, yet I agree it is way overpriced/expensive.

john

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