Subject: NML for the Connoiseur Posted by David McClain on Wed, 29 Mar 2000 08:00:00 GMT View Forum Message <> Reply to Message

Dear OCaml Enthusiasts.

It has been stewing for more than a year now, a continuing work in progress, but it is high time that I release a matured copy of the code and sources to the world. NML (Not ML, Numeric Modeling Language, Numeric ML, Nearly ML, ...) is an interactive, dynamically typed, tail pure, compiled (to native code closures) functional language, whose syntax closely follows that of OCaml, but where all math operations are overloaded and vectorized on real and complex data in the form of lists, vectors, multidimensional arrays, tuples, etc.

It has proven itself in the field for the past 9 months. Numerous samples are included with the sources, including a translation of Norvig's Prolog interpreter (just a toy... but it shows the power of NML for non-numeric as well as numeric problems). NML is very fast!!! on large array-based problems, and is reasonably fast on non-numeric problems (probably not as efficient as OCaml) but certainly a lot easier to code interactively at the command line (no type inferencing and no type checking... hence inherently unsafe).

The application and its sources presently runs on Win/NT 4.0 and Linux. But the Linux port has been ignored for the past 5 months. It produces very nice looking graphics, 2-D data plots, pseudo-color image displays, and shaded surface plots. It is shareware in the sense of the OCaml license, and a request that acknowledgement be given to the original authors. Source consists of about 28K lines of OCaml, and 10K lines of supporting C/C++ code.

You can find more about it at http://www.azstarnet.com/~dmcclain/nmlpromo.html and the zipped sources and NML.exe at http://www.azstarnet.com/~dmcclain/nml.zip (1100 KB).

Many thanks to Xavier and the others at INRIA for their wonderful language system!!

- D. McClain, Sr. Scientist Raytheon Systems Co. Tucson, AZ