
Subject: Re: IDL as programming language?
Posted by [harmonic](#) on Thu, 15 Sep 1994 21:24:48 GMT
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> : I would be interested in seeing your timings. To date we haven't
> : seen any of the "matrix languages", (i.e. IDL, MATLAB, Gauss, etc.) that
> : do matrix multiplication faster than O-Matrix.
>
> What is O-Matrix? Is it similar to IDL and PV-Wave?
>
> - Mike

O-Matrix is a reasonably priced,(\$95) object-oriented analysis and visualization tool for the PC that uses a simple interpreted language that operates on matrices instead of individual numbers.

Features:

- Diverse set of built-in functions including:
Algebraic and trigonometric functions, interpolation, FFTs, inverse FFTs and 2D FFTs, QR factorization, Bessel functions, singular value decomposition, sorting, random number generation
- Comprehensive graphics including:
x-y plots with multiple viewports, contour plots, mesh plots, polar plotting, histograms, bar plots, stair plots, error plots, mouse manipulation of plotted data, and publication quality output
- Extensive library of functions including:
wavelets ,spectral analysis, Kalman filter, normal distributions, circuit simulator, circuit optimizer, signal processing, splines, optimization, two-dimensional integration, convolution, auto-regressive correlation, special functions, Cholesky factorization, spectral estimation, differential equation solvers, F-test, t-test, means, medians, eigenvalue solver, matrix exponentiation, discrete prolate spheroidal sequences, GPS tracking functions ...
- Built in debugger with extensive error messages
- Extensive on-line help, and free technical support by phone, fax, and e-mail
- 32-bit implementation allows matrices and programs up to 32 MB.
- An optimized environment for execution throughput faster than other "matrix" languages.
- User-definable functions with variable numbers of arguments and recursion
- Six matrix types including character, integer, real, double-precision, logical, and complex double-precision

If you have further questions, please contact us at:

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