# Educational

# Path: /NEBULA1/Educational

## Description: Educational applications

ARC

#### NEBULA1/Educational/aa\_Intel\_m68k\_Only

octave-1.1.1 Rex Dieter Octave is a high-level language, primarily intended for numerical computations. It provides a convenient command line interface for solving linear and nonlinear problems numerically, and for performing other numerical experiments. Motorola/Intel

#### NEBULA1/Educational/aa\_Intel\_Only

CellFractionation3.1 Version 3.1.2 by Charles G. Fleming and Glen G. Wurst Intel

DiffusionAndOsmosis3.1 Version 3.1.1 by Charles G. Fleming and Ann M.Kleinschmidt Intel

Nugs Version 1.0 by M.Wesemann This is a program that simulates evolution. Intel

### ODE Version 2.0 by Paul Burchard A flow viewer for ordinary differential equations

Water 2.0.intel.app

Water is a program to calculate dependent state, thermodynamic, transport, and electrostatic properties of water as a function of user-specified state conditions and unit and triple point conventions. Intel

#### NEBULA1/Educational/aa\_m68k\_Only

ArsMagna Version 1.0 by Jeff Adams First, a definition: An anagram of a word or phrase is a rearrangement of all of the letters in the original word or phrase to form a second word or phrase. All of the letters must be used exactly as many times in the anagram as they were in the original. Motorola

Doctor Version 1.0 by Derek Ney An animation of body parts. Motorola

Epsilon - Delta Version 1.0 by Dr. Eric Gossett This lab will help you gain an intuitive understanding of the formal definitions for limits, continuity, and uniform continuity. Motorola

Flash Version 99.99 by Ernest N. Prabhakra FLASH produces flashcards on the NeXT. Motorola GeneMapping.app Motorola

Graviton Version 0.31B by Kevin Solie Graviton Jr. simulates the gravitational effects on bodies in two-space. Motorola

Laser Version 1.00 rate Equation Model for 4-Stage Laser Motorola

Lingwhat Version 0.9 by Scott Deerwester. Lingwhat is an application for determining what language a book or article is wrtten in. It claims neither to be complete nor absolutly correct. As worst, it should be entertaining. Motorola Mandel Version 6.4 by R.Pajarola This application computes the normal Mandelbrot Set. Motorola

NeXTcontour Version 1.4 by Thomas H. Pulliam NeXTcontour is intended for use in plotting contours of functions from either 2D (two-dimensional) or 3D (three-dimensional) data sets.

Motorola

NXSpice.app NeXT Spice3c1 Version 1.3 by Ronald D. Fellman Motorola

Pendulum

Version 1.0 Damped Driven Pendulum Motorola

TimesTable Version 1.0 by Archie Bird III This is a program designed to emulate the guessing style of some of the toys available for small children that are learning the multiplication tables. Motorola

#### NEBULA1/Educational/

AMS Article Management System Version 1.0 by Krishnaprasad Kamisetty Stores records of research paper. Great for your school papers Includes source code Motorola/Intel/PA-RISC/SPARC

Chaos...

Version 1.1 by Sean L. Hill This is a very small sample program that may be useful to beginning programmers. It demonstrates the use of UserPaths for fast drawing of a series of data points. Includes source code Motorola/Intel/PA-RISC/SPARC

CurveGrader Version 0.8 by Rob Ferrante CurveGrader takes a list of test scores, normalized to the range 0 to 100, and presents a tool for determining breakpoints between assigned letter grades. Grades can then be loaded back into the list of the corresponding scores. Includes source code Motorola/Intel/PA-RISC/SPARC Dual by Ross Cutler Dual is a simple application to demonstrate the concept of duality as used in computational geometry (and arrangements). Includes source code Motorola/Intel/PA-RISC/SPARC

Fitts Fitt's Law Ecperimenter Version 1.0 February 1991 by Stuart Ritchie A program to test human motor skills on user interfaces Includes source code Motorola/Intel/PA-RISC/SPARC

FractalView.1.0 Version 1.0 by Peter Merz FractalView is a program to calculate and display fractal sets like the popular Mandelbrot Set. Motorola/Intel/PA-RISC/SPARC gap-3.4.2

Rex Dieter

GAP is a system for computational discrete algebra, which we have developed with particular emphasis on computational group theory, but which has already proved useful also in other areas. The name GAP is an acronym for \*Groups, Algorithms, and Programming\*. Motorola/Intel/PA-RISC/SPARC

Henon Version 0.7 by Anders Bertelrud A Henon mapping is an area-preserving map of a plane. Includes source code Motorola/Intel/PA-RISC/SPARC

HodgePodge3 Version 3 by Allen King A cellular automaton, described in Scientific American May 1985, involving the deterioration and curing of the health of a two-dimensional array of cells. Includes source code Motorola/Intel/PA-RISC/SPARC

IP\_Graph3D

by Varun Mitroo

Graph3D draws a three-dimensional mathematical function within a bounding volume. The user is able to rotate this function freely as well as change the scale and the degree of perspective. Currently, there is no option to change the function displayed. Includes source code

Motorola/Intel/PA-RISC/SPARC

Julia Version 2.0 August 1990 by Edmund Ronald of  $f(z) = z^2+c$ , The Beauty of Fractals Includes source code Motorola/Intel/PA-RISC/SPARC Ip\_solve-2.0 Rex Dieter The public domain linear optimization package: Ip\_solve with a few test examples Includes source code Motorola/Intel/PA-RISC/SPARC

macaulay-3.0 Rex Dieter Macaulay is a system for computation in algebraic geometry and commutative algebra. Currently, Macaulay is one of the few systems that require little space and time to compute a Groebner basis of any system of polynomial equations. Motorola/Intel/PA-RISC/SPARC

MolViewer Version 0.2 by Steve Ludtke Most computers around nowadays have some sort of molecular modeling/viewing program available in the public domain or commercially. I needed such a beast for my research (molecular biophysics), and couldn't find one for the NeXT ... hence MolViewer was born. Includes source code Motorola/Intel/PA-RISC/SPARC

NNV Neural network Viewer Version 1.3 by David J. Ferrero Graphically displays feed forward neural networks based on network descriptions in a .network file breaking the network up into layers, and evaluating the activity within the network based on the supplied .input file. Includes source code Motorola/Intel/PA-RISC/SPARC

Ortografie Ralf Suckow Ortografie is a spelling trainer. Motorola/Intel/PA-RISC/SPARC

pari-1.39

**Rex Dieter** 

The PARI system is a package which is capable of doing formal computations on recursive types at high speed; it is primarily aimed at number theorists, but can be used by people who primary need is speed.

Motorola/Intel/PA-RISC/SPARC

PrimeSpiral Version Nov 22,1991 by C.D.Lane The concept of the prime spiral is simple: start at the center of a square and spiral outwards, inverting those bits whose positions on the spiral correspond to a prime number. Includes source code Motorola/Intel/PA-RISC/SPARC

PrimeThreads

by David S. Joerg Tries to find the highest prime number (unstable application) Includes source code Motorola/Intel/PA-RISC/SPARC

RasMol Roger Sayle's popular molecular graphics program. Includes source code Motorola/Intel/PA-RISC/SPARC

Sphere Version 1.0 by Varun Mitroo and Tyler Gingrich The light source is fixed in the Z-direction and the program uses lambert's law of cosines to calculate the shading. Includes source code Motorola/Intel/PA-RISC/SPARC

Traveling Salesman Problem by Nolan R. Davis and Joseph Jeffery An application of simulated annealing Includes source code Motorola/Intel/PA-RISC/SPARC