Netlib Mathematical Software Distribution System

Address: None

E-mail: netlib@ornl.gov

Phone: None

Description

Netlib is a system for distribution of mathematical software by electronic mail. To get information about Netlib, mail the following one-line message to netlib@ornl.gov.

send index

For background about Netlib, see Jack J. Dongarra and Eric Grosse, ''Distribution of Mathematical Software Via Electronic Mail,'' *CACM* (1987) Vol. 30, pp. 403-407.

The Netlib library includes the following software collections (for details on each, see the index message).

a - approximation algorithms (almost empty, but soon to grow)
alliant - set of programs collected from Alliant users
apollo - set of programs collected from Apollo users
benchmark - various benchmark programs and a summary of timings
bihar - Bjorstad's biharmonic solver
bmp - Brent's multiple precision package
cheney-kincaid - programs from the text Numerical Mathematics and Computing.
conformal - Schwarz-Christoffel codes by Trefethen, Bjorstad & Grosse
core - machine constants, blas
domino - communication and scheduling of multiple tasks; Univ. Maryland
eispack - matrix eigenvalues and vectors
elefunt - Cody and Waite's tests for elementary functions
errata - corrections to numerical books
fishpack - separable elliptic PDEs; Swarztrauber and Sweet
fitpack - Cline's splines under tension
fftpack - Swarztrauber's Fourier transforms
fmm - software from the book by Forsythe, Malcolm, and Moler
fn - Fullerton's special functions
gcv - Generalized Cross Validation
go - ''golden oldies,'' gaussq, zeroin, lowess, ...
graphics - ray-tracing harwell - MA28 sparse linear system

hompack - nonlinear equations by homotopy method
itpack - iterative linear system solution by Young and Kincaid
lanczos - Cullum and Willoughby's Lanczos programs
laso - Scott's Lanczos program for eigenvalues of sparse matrices
linpack - gaussian elimination, QR, SVD by Dongarra, Bunch, Moler, Stewart
lp - linear programming machines—short descriptions of various computers
microscope - Alfeld and Harris' system for discontinuity checking
minpack - nonlinear equations and least squares by More, Garbow, Hillstrom
misc - everything else
na-digest - archive of mailings to NA distribution list
napack - numerical algebra programs
ode - ordinary differential equations
odepack - ordinary differential equations from Hindmarsh
paranoia - Kahan's floating point test
pchip - hermite cubics Fritsch & Carlson
pltmg - Bank's multigrid code; too large for ordinary mail
polyhedra - Hume's database of geometric solids port—the public subset of PORT library
pppack - subroutines from de Boor's Practical Guide to Splines
quadpack - univariate quadrature by Piessens, de Donker, Kahaner
siam - typesetting macros for SIAM journal format
slatec - machine constants and error handling package from the Slatec library
sparse - a set of c codes for sparse systems of equations
sparspak - George + Liu, sparse linear algebra core
specfun - transportable special functions
toeplitz - linear systems in Toeplitz or circulant form by Garbow
toms - Collected Algorithms of the ACM
y12m - sparse linear system (Aarhus)

Network Access

Send electronic mail to netlib@ornl.gov. Although messages will be returned by netlibd@mcs.anl.gov, please do not mail to that address.
Additional copies of the server run at:

netlib@research.att.com in New Jersey
netlib@nac.no in Oslo, Norway
netlib@draci.cs.uow.edu.au in Australia

Who Can Use the Catalog

Anyone can use any of the servers.

Miscellaneous Information

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