Usage of libNMF 1.03

January 18, 2011

1 Building the library

The library can be build via the provided makefile, which by default uses the "gcc" compiler.

The target *lib* builds the static library and target *shared* builds the shared library. By default the makefile compiles without the compiler flag *-fPIC* (position independent code) which is needed for generating the shared library, though.

Optionally one could alter compiler flags in the makefile before building the library.

2 Building the library running Windows

The libNMF library was successfully built under Windows XP by using "Cygwin". We alternatively testes the installation using "Windows Services for UNIX" and "MinGW" but both failed with errors when calling the Makefile.

3 Linking the library

Linking the library requires linking of ARPACK, BLAS and LAPACK libraries as well.

4 Usage

This library can be used by either calling *nmfDriver* or the individual computational routines for a non negative matrix factorization. The following example files can be found in the directory "example".

An example call for the first case can be found in the file "example.c".

An example call for the second case can be found in the file "example_withoutdriver.c"