NMF: Unit testing results*

Renaud Gaujoux

NMF version 0.9.4 as of November 26, 2012

1 Details

```
RUNIT TEST PROTOCOL -- Mon Nov 26 15:36:30 2012
****************
Number of test functions: 78
Number of deactivated test functions: 4
Number of errors: 0
Number of failures: 0
1 Test Suite :
package: NMF - 78 test functions, 0 errors, 0 failures
Details
********
Test Suite: package:NMF
Test function regexp: ^test.
Test file regexp: ^runit.*.[rR]$
Involved directory:
/tmp/tmp.GnOtsWnTQo/NMF/tests
_____
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.aheatmap.R
test.mfrow: (1 checks) ... OK (0.64 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.algorithms.r
test.brunet: (14 checks) ... OK (4.34 seconds)
test.cversions.brunet: (1 checks) ... OK (1.62 seconds)
test.cversions.lee: (1 checks) ... OK (1.75 seconds)
test.cversions.lnmf : DEACTIVATED, Algorithm 'lnmf' is not fully working.
test.cversions.ns: (1 checks) ... OK (2.05 seconds)
test.cversions.offset: (1 checks) ... OK (4.28 seconds)
test.lee: (14 checks) ... OK (4.55 seconds)
test.lnmf : DEACTIVATED, Algorithm 'lnmf' is not fully working.
test.ns: (14 checks) ... OK (4.98 seconds)
test.offset: (14 checks) ... OK (5.06 seconds)
test.port_brunet: (8 checks) ... OK (4.56 seconds)
test.snmf: (40 checks) ... OK (10.93 seconds)
```

^{*}Vignette computed on Mon Nov 26 15:36:30 2012

```
_____
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.distance.r
test.KL: (9 checks) ... OK (1.63 seconds)
test.rss: (4 checks) ... OK (0.11 seconds)
_____
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.interface.r
test.compare: (5 checks) ... OK (12.1 seconds)
test.nmf.callback: (22 checks) ... OK (17.82 seconds)
test.nmf.custom: (87 checks) ... OK (1.43 seconds)
test.nmf.default: (8 checks) ... OK (0.33 seconds)
test.nmf.dots: (11 checks) ... OK (1.12 seconds)
test.nmf.method: (24 checks) ... OK (7.98 seconds)
test.nmf.model: (22 checks) ... OK (0.94 seconds)
test.nmf.multirank: (10 checks) ... OK (5.67 seconds)
test.nmf.options: (18 checks) ... OK (5.91 seconds)
test.nmf.parameters: (53 checks) ... OK (0.78 seconds)
test.nmf.seed.argument: (127 checks) ... OK (9.52 seconds)
test.nmf.seed.equivalent: (11 checks) ... OK (12.5 seconds)
test.nmf.seed.fault: (4 checks) ... OK (1.97 seconds)
test.nmf.seed.repro: (8 checks) ... OK (15.18 seconds)
test.nmf.stop: (6 checks) ... OK (4.24 seconds)
test.parallel: (6 checks) ... OK (11.97 seconds)
test.registry: (10 checks) ... OK (0.11 seconds)
test.seed: (33 checks) ... OK (0.15 seconds)
test.summary: (3 checks) ... OK (3.05 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.NMFclass.r
test.basis: (2 checks) ... OK (0 seconds)
test.class.NMFns: (65 checks) ... OK (0.05 seconds)
test.class.NMFstd: (28 checks) ... OK (0.01 seconds)
test.coef: (2 checks) ... OK (0 seconds)
test.connectivity: (3 checks) ... OK (0.01 seconds)
test.deviance: (9 checks) ... OK (0.01 seconds)
test.dimensions: (4 checks) ... OK (0 seconds)
test.dimnames: (173 checks) ... OK (0.09 seconds)
test.entropy: (5 checks) ... OK (0 seconds)
test.misc: (9 checks) ... OK (0 seconds)
test.nmfModel: (363 checks) ... OK (0.16 seconds)
test.NMF.rnmf: (93 checks) ... OK (1.46 seconds)
test.predict: (10 checks) ... OK (0.01 seconds)
test.purity: (5 checks) ... OK (0 seconds)
test.sparseness: (13 checks) ... OK (0.01 seconds)
test.subset: (51 checks) ... OK (0.06 seconds)
test.syntheticNMF: (5 checks) ... OK (1.82 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.NMFfit-class.r
test.deviance: (0 checks) ... OK (0 seconds)
test.isNMFfit: (6 checks) ... OK (2.84 seconds)
test.niter: (4 checks) ... OK (1.3 seconds)
test.nmf.equal: (304 checks) ... OK (3.14 seconds)
_____
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.NMFSet.r
test.fit: (9 checks) ... OK (3.85 seconds)
test.interface: (6 checks) ... OK (1.93 seconds)
test.join.multipleAndSingleRunsMethods: (2 checks) ... OK (3.49 seconds)
```

```
test.join.multipleRuns: (2 checks) ... OK (4 seconds)
test.join.singleRuns: (7 checks) ... OK (1.06 seconds)
test.multipleruns: (2 checks) ... OK (1.89 seconds)
_____
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.NMFStrategy-class.r
test.accessors: (26 checks) ... OK (0.06 seconds)
test.constructor: (16 checks) ... OK (0.06 seconds)
test.constructorMethod: (3 checks) ... OK (0.03 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.options.r
test.nmf.getOption: (2 checks) ... OK (0 seconds)
test.nmf.options: (9 checks) ... OK (0.01 seconds)
-----
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.parallel.r
test.ForeachBackend: (4 checks) ... OK (2.88 seconds)
test.gVariable: (11 checks) ... OK (12.92 seconds)
test.nmf: (31 checks) ... OK (28.18 seconds)
test.setupBackend: (4 checks) ... OK (0.06 seconds)
test.shared_memory_doMC: (12 checks) ... OK (6.11 seconds)
test.shared_memory_doMPI: DEACTIVATED, NMF shared memory feature does not currently work with doMPI.
test.shared_memory_doParallel: (12 checks) ... OK (9.38 seconds)
test.shared_memory_doSEQ: (11 checks) ... OK (6.48 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.seed.r
test.nndsvd: (10 checks) ... OK (0.03 seconds)
test.none: (6 checks) ... OK (0.03 seconds)
test.random: (26 checks) ... OK (0.12 seconds)
test.restore: DEACTIVATED, The option 'restore.seed' is deprecated. Related tests are now in test.seed.
test.seed.effect: (15 checks) ... OK (18.41 seconds)
test.zzz.all: (297 checks) ... OK (26.77 seconds)
Test file: /tmp/tmp.GnOtsWnTQo/NMF/tests/runit.utils.r
test.nmfWrapper: (16 checks) ... OK (0.99 seconds)
test.rmatrix: (16 checks) ... OK (0.02 seconds)
Total execution time
********
  user system elapsed
261.763 32.393 306.540
```

Session Information

- R version 2.15.2 (2012-10-26), i686-pc-linux-gnu
- Locale: LC_CTYPE=en_ZA.UTF-8, LC_NUMERIC=C, LC_TIME=en_ZA.UTF-8, LC_COLLATE=en_ZA.UTF-8, LC_MONETARY=en_ZA.UTF-8, LC_MESSAGES=en_ZA.UTF-8, LC_PAPER=C, LC_NAME=C, LC_ADDRESS=C, LC_TELEPHONE=C, LC_MEASUREMENT=en_ZA.UTF-8, LC_IDENTIFICATION=C
- Base packages: base, datasets, graphics, grDevices, grid, methods, parallel, stats, utils
- Other packages: bigmemory~4.3.0, bigmemory.sri~0.1.2, Biobase~2.16.0, BiocGenerics~0.2.0, digest~0.5.2, doMPI~0.1-5, doParallel~1.0.1, fastICA~1.1-16, foreach~1.4.0, iterators~1.0.6, NMF~0.9.4, pkgmaker~0.9.5, RColorBrewer~1.0-5, Rcpp~0.10.0, RcppOctave~0.8.5, registry~0.2, Rmpi~0.6-1, rngtools~1.0, RUnit~0.4.26, stringr~0.6.1, synchronicity~1.1.0

• Loaded via a namespace (and not attached): codetools~0.2-8, colorspace~1.2-0, compiler~2.15.2, gridBase~0.4-5, plyr~1.7.1, tools~2.15.2, xtable~1.7-0