Package: ROOPSD (via r-universe)

September 10, 2024

Title R Object Oriented Programming for Statistical Distribution

Date 2023-09-11 **Version** 0.3.9

Description Statistical distribution in OOP (Object Oriented

Programming) way. This package proposes a R6 class interface to classic statistical distribution, and new distributions can be easily added with the class AbstractDist. A useful point is the generic fit() method for each class, which uses a maximum likelihood estimation to find the parameters of a dataset, see, e.g. Hastie, T. and al (2009) <isbn:978-0-387-84857-0>. Furthermore, the rv_histogram class gives a non-parametric fit, with the same accessors that for the classic distribution. Finally, three random generators useful to build synthetic data are given: a multivariate normal generator, an orthogonal matrix generator, and a symmetric positive definite matrix generator, see Mezzadri, F. (2007) <arXiv:math-ph/0609050>.

URL https://github.com/yrobink/ROOPSD

Depends R (>= 3.3) **License** CeCILL-2 **Encoding** UTF-8

Imports methods, R6, Lmoments, numDeriv

RoxygenNote 7.2.3

Repository https://yrobink.r-universe.dev

RemoteUrl https://github.com/yrobink/roopsd

RemoteRef HEAD

RemoteSha 1a51d74a0b66d348213419f3517dc3621a34ce58