AdMit: Adaptive mixture of Student-t distributions in R

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Summary

AdMit is an R package (R Core Team, 2016) which provides flexible functions to approximate a certain target distribution and to efficiently generate a sample of random draws from it, given only a kernel of the target density function. The core algorithm fits an adaptive mixture of Student-t distributions to the density of interest, and then, importance sampling or the independence chain Metropolis-Hastings algorithm is used to obtain quantities of interest for the target density, using the fitted mixture as the importance or candidate density. The estimation procedure is fully automatic and thus avoids the time-consuming and difficult task of tuning a sampling algorithm. Full description of the algorithm and numerous application are available in Ardia et al. (2009a) and Ardia et al. (2009b). The latest version of the package is available at `https://github.com/ArdiaD/AdMit`.

References

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