

Corrigendum: ‘Transient Analysis of Rewarded Continuous Time Markov Models by Regenerative Randomization with Laplace Transform Inversion’

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Two clarifications are needed.

The Laplace transform inversion algorithm used in the numerical method described in the paper [1] differs essentially from the one implemented in the DLAINV FORTRAN subroutine described in [27] only in that: (1) the discretization error is strictly controlled using the values for a given by the third displayed equation on page 94, left column and the first two displayed equations on page 94, right column; (2) T is taken equal to $8t$ instead of $16t$; (3) the series accelerated by the epsilon algorithm is the one given by the last displayed equation on page 92, right column, with the shift described after that equation; and (4) Brzinski’s recursion described in [29] is used when

important cancellations are detected in the standard implementation of the epsilon algorithm.

The results for the C.mmp system example were obtained for $\lambda_P = \lambda_M = 10^{-4} \text{ h}^{-1}$, $\lambda_S = 10^{-6} \text{ h}^{-1}$ and $\mu_P = \mu_M = \mu_S = 1 \text{ h}^{-1}$, and RRL was run taking as regenerative state the single state without failed components.

REFERENCE

- [1] Carrasco, J.A. (2003) Transient analysis of rewarded continuous time Markov models by regenerative randomization with Laplace transform inversion, *Comput. J.*, **46**, 84–99; doi: 10.1093/comjnl/46.1.84