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Machine learning for quantitative finance: fast derivative pricing, hedging and fitting

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Abstra

In this p…he context of tradit…s, we can arrive at…earning techniqu…y for this extra…accuracy is often…cal point of view. Th…ontext, we fit sophistic…e estimati…illa option values u…cing of exotic op…

Keywor…rface

Disclosure statement

No potential conflict of interest was reported by the authors.

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Notes

† Matrix inversion is often implemented via a Cholesky decomposition (Benoît 1924, Rasmussen and Williams 2006), which is more stable than actually inverting the matrix. For small matrices, i.e. small values of n, ordinary matrix inversion can be performed. For the results in this paper we used the Matlab functions fitrgp and predict. However if the dimension increases, special techniques need to be deployed. We mention LU-factorization and blockwise Cholesky decomposition, which aim at solving t rge matrices routines to handle p

† κ = rat long run variance

† For eac construct the 1

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