

A Kriging Estimator based on the Partition of Unity Method

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We propose a new tool, namely the Kriging Estimator [3], based on the Partition of Unity method (KEPU). The theoretical studies about the propagation of the uncertainties from the local predictors to the global one enable us to define the PU method (see [1, 2, 4]) in a stochastic framework. As numerically confirmed, when the number of instances grows, such a method allows us to significantly reduce the usually high complexity cost of Gaussian processes.

References

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