

Errata for

Maximum likelihood estimation and uncertainty quantification for Gaussian process approximation of deterministic functions*

The claim

Furthermore, $P_{X_N}(x, x)^{1/2} \asymp N^{-\alpha/d+1/2}$ for any $x \notin \bigcup_{N=1}^{\infty} X_N$.

in Theorem 4.4 is not correct. This claim is based on an incorrect result that

$$\delta_{x, X_N} = \min_{i=1, \dots, n} \|x - x_i\|$$

tends to zero as $N^{-1/d}$ if the sequence of point sets X_N is quasi-uniform. The proof given for this assertion at the end of the proof of Theorem 4.4 in Appendix A is erroneous. In fact, one can construct a quasi-uniform sequence of point sets X_N and $x \notin \bigcup_{N=1}^{\infty} X_N$ such that

$$\liminf_{N \rightarrow \infty} N^{1/d} \delta_{x, X_N} = 0.$$

As a consequence, the asymptotics in Theorem 4.10 do not necessarily hold for every $x \in \Omega$.

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