A comprehensive guide to Kriging metamodeling toolboxes

Framework	Language	License	Release	Developers	Support	Documentation	Functional basis of Kring trend	Correlation function $R(x,x'; heta)$	Optimization Problem	Optimization algorithm	HPC dispatcher	Run on cloud	User-friendly	Plus	Minus
<u>GPyTorch</u>	Python	MIT License	\/	Columbia University Cornell University Meta New York University University of Pennsylvania		docs.gpytorch.ai/en/stable	/ -								
<u>UQLab</u>	MATLAB	BSD 3-clause license	<u>v2.0.0</u>	ETH Zürich		uqlab.com/documentation	Ordinary Kriging Simple Kriging Universal Kriging	Exponential Gaussian Linear Matern	Cross validation estimate Maximum-Likelihood estimation	CMA-ES Genetic Algorithm Interior point				HPC dispatcher RBDO module	
UQ[py]Lab Beta	Python	ETH Zürich		uqpylab.uq-cloud.io/getting-started	Ordinary Kriging Simple Kriging Universal Kriging	Gaussian Linear	Cross validation estimate Maximum-Likelihood estimation	CMA-ES Genetic Algorithm Interior point				Cloud RBDO module	Cloud		
OpenTurns*+	Python	Airbus Phimeca Engineering		https://openturns.github.io/openturns/latest/contents.html	Ordinary Kriging Simple Kriging Universal Kriging	Exponential Linear Matern							Dispersive		
SMT*	Python	Isae Supaero Nasa Onera University of Michigan		https://smt.readthedocs.io/en/stable/	Ordinary Kriging Simple Kriging Universal Kriging	Gaussian Matern	Maximum-Likelihood estimation	COBYLA					Only for surrogate modelling		
<u>UQpy*</u>	Python	SURG John Hopkins		https://uqpyproject.readthedocs.io/en/latest/index.html	Simple Kriging	Cubic Exponential Gaussian Linear Spherical Spline User-defined	Maximum-Likelihood estimation					Reliability module			
TensorFlow*+	- Python	Google Brain Team		https://www.tensorflow.org/probability/api_docs/python/tfp/distributions/GaussianProcess									Close system Limited		
scikit-learn*	Python	Scikit-learn @ Inria Foundation		https://scikit-learn.org/stable/modules/classes.html? highlight=gaussian%20process#module-sklearn.gaussian_process									Close system Limited		
GPflow*+	Python	University of Cambridge University of Oxford		https://gpflow.readthedocs.io/en/develop/		Linear Matern							Limited		
<u>GPy</u>	Python	Sheffield Machine Learning Software		https://gpy.readthedocs.io/en/deploy/									Dispersive		
<u>pyGPs</u>	Python	Washington University in St Luis		https://github.com/marionmari/pyGPs/tree/master/doc									Dispersive		
MUQ*+	C++ Python	MIT		https://mituq.bitbucket.io/source/_site/latest/groupGaussianProcesses.html	Simple Kriging		Maximum-Likelihood estimation						C++		
PyMC3*															
<u>PyMC-learn</u>															
GPflux															