Gaussian process

Definition:

Random process f is **Gaussian**, if for any finite number points, their joint distribution is normal:

$$\forall n \in \mathbb{N} \quad \forall x_1, x_2, \ldots, x_n \in \mathbb{R}^d \quad \begin{pmatrix} f(x_1) \\ f(x_2) \\ \ldots \\ f(x_n) \end{pmatrix} \sim \mathcal{N}$$