PTML 8: 09/06/2022

1 CURSE OF DIMENSIONALITY AND ADAPTIVITY TO A LOW DIMEN-
SIONAL SUPPORT

Run a simulation that illustrates the curse of dimensionality by computing the error of a nearest neighbor estimator of f^*, for f^* being the euclidean norm on $\mathbb{R}^d$, for several numbers of samples n and several dimensions d. For instance, you can observe a picture like the one in figure 1.
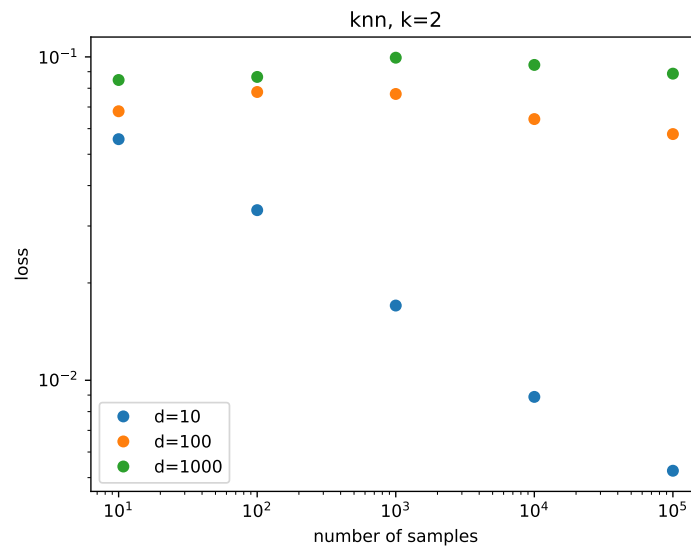

FIGURE 1 – Curse of dimensionality