

HW #4

- ① Bishop 7.4
- ② Bishop 7.8
- ③ Carry out SVR (SVM regression) on the Bessel function ($J_0(x)$) dataset from HW#1 & HW#3.

I recommend using `sklearn.svm.SVR` from `scikit-learn`, but this is not obligatory.

Try 'rbf' and 'poly' kernels (for the latter, play with the 'degree' hyperparameter)

Plot the fits for several values of C (regularization prm) and ϵ (size of the ϵ -tube). Discuss the results and compare them qualitatively with ~~the~~ GPR results from HW#3, Pr. 4.