

Feedback group 29 task 43

by group 30

43 Cross Validation - Programming - 07.01.2021

This exercise is about a variation of linear regression and model selections. The corresponding notebook can be found in the homework folder as `BSplinesCrossValidationHyperparameters`. Note, your task is only to implement **Part 4** about cross validation. The preceding Parts 1 to 3 have to be implemented as well in order to work on Part 4 but you will not have to present them.

```
In [13]: def bspline_regression(X, Y, knots, deg):  
    """  
    Performs a B-spline regression.  
  
    Parameters  
    -----  
    X : 1-D ndarray  
        samples of the independent variable  
    Y : 1-D ndarray  
        samples of the dependent variable  
    knots : 1-D array-like  
        knots of the splines  
    deg : integer  
        order of splines  
  
    Returns  
    -----  
    w : ndarray  
        egression weights  
    """  
  
    #-- enter code here --#  
  
    return w
```

Your code is not executable because you have not implemented everything. Therefore, you should also provide the parts 1 to 3 for your final assignment, as this is also required by the assignment itself.

But as far as we can evaluate your assignment, we think it is very well structured and has many helpful comments.

Best regards

Group 30