Ozyegin University ML1

HOMEWORK ASSIGNMENT II

- Work individually.
- Submit a code and a short explanation along the code. The names of the files should be YOURNAME.py (or YOURNAME.ipynb) and YOURNAME.docx (e.g. OrsanOzener.py, OrsanOzener.docx)
- Any type of plagiarism will not be tolerated and will lead to disciplinary actions.
- Due Date: 29th of April 2024, 13:00. Please submit your report through LMS. Only ONE submission per person.

1 Introduction

In this assignment, you are supposed to work on a binary classification problem in which we need to predict the churn of customers of a Telecom company. The data is on the following csv.file: "Churn.csv".

The performance criteria will be the "Accuracy Score" and "ROC AUC Score". In this homework, you are supposed (i) perform the cross-validation scheme to select a single classification method, (ii) boost the performance of the method that you have selected by performing a hyperparameter-tuning step. You are not allowed use any models other than the ones discussed in the class.

If you have any questions, please send an email to: orsan.ozener@ozyegin.edu.tr