

CMPE 407 - Machine Learning

Homework 02

Deadline: 26.04.2021 23.59

RULES

- Codes and solutions without documentation (comments) will not be evaluated.
- This work is an individual study. Plagiarism is strictly prohibited, involved students will get zero.

SUBMISSION

- Submit your solution as [id_name_surname_cmpe407_hw02].ipynb.
- Late submissions will not be accepted. Submission system will be closed after deadline. Submissions via e-mail will not be accepted.

QUESTION

1. (20 point) Visualize the Mobile Phone dataset uploaded in Learn¹. Apply the necessary pre-processing to prepare the data for the models.
2. (20 point) Choose your aim (for example, predicting the gender etc.) Choose one machine learning technique (classification, regression, or clustering) to fulfil your aim. Explain your aim and why you selected the technique that you chose.
3. (40 point) Train different models. Make different experiments with different hyper-parameters to find the best model for given dataset.
4. (20 point) Provide discussion about your results. The qualitative will be considered more worthy than the explanations.

Note: Ensure that your programs are fully documented, using comments.

¹For details about dataset: <https://www.kaggle.com/iabhishekofficial/mobile-price-classification>