

CMP 466 – Machine Learning and Data Mining- Spring 2021

Team Project- Assignment 4

Please submit a report including the following by the deadline:

- 1- [20 points] Perform k-fold cross validation on your dataset with $k= 5$ and/or 10. Apply KNN classifier, tweak the hyper parameters manually and make sure your model is well-fitted.
- 2- [20 points] Report the following classification performance metrics: training accuracy, testing accuracy, precision, recall, F-score, and confusion matrix.
- 3- [20 points] Similarly, perform k-fold cross validation on your dataset with $k= 5$ and/or 10. Apply Naïve Bayes classifier (e.g., GaussianNB), tweak the hyper parameters manually and make sure your model is well-fitted.
- 4- [20 points] Report the following classification performance metrics: training accuracy, testing accuracy, precision, recall, F-score, and confusion matrix.
- 5- [20 points] Summarize and discuss your results for each of the classifiers and the different values of their hyper parameters.

Submission: Please submit your assignment to iLearn by the deadline. Submission should include the report and the code. Late submissions will be penalized according to the syllabus late policy. No submissions will be accepted after four days of the deadline.