



COMP4388: Machine Learning

Fall 2022/2023

Project 2: Deadline 10 February 2023

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In this project you are required to build a model for a classification task using the file provided in the link below. You can use any machine learning algorithm given that you can explain it carefully in your discussion. Here, you should compare between different algorithms among the algorithms we have learnt in the course.

In your work, you should go through the basic EDA steps and understand and analyze the features, test the correlation between the features, perform any necessary steps related to the features such as missing values, ... etc.

In your submission, you should provide a report of the problem at hand, what are the EDA steps that you performed, the split of data, explain the machine learning algorithms that you selected, present the technical details of the implementation, proper analysis of the training and test error. In terms of performance measures, you should show the accuracy, precision, recall, and f-score on the test set. Additionally, state the details related to the bias and variance on this set.

The report should have the following sections:

1. Introduction: includes a general introduction of the work
2. EDA: any details, graphs, pre-processing steps of the data
3. Algorithm: explain the used algorithm
4. Results: state the results

This is a group work (groups of two). You have to turn in a softcopy of your Python code and a Word document containing the information required to as specified above. The document should be on a paper-format. Please send your submission as a response to this message only.

The link of the data folder:

<https://www.dropbox.com/s/l9dt0h24wichi6a/WeatherData.xls?dl=0>

If you have any questions, please feel free to contact me via Ritaj or email:

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