

4105931 機器學習

Assignment #3 – Adaptive Boosting

Deadline : 2023/4/19 11:59 pm

Trace the reference code of Adaboost and answer the following questions:

1. List all parameters that should be set before running Adaboost. Explain the meanings of those parameters.
2. How each weak learner is decided and trained in each iteration? What is the learning algorithm A ? Does it use bootstrapped dataset? If not, how D^t is obtained for each iteration?
3. List the first three weak learners when the learning iteration stops. Explain these decision stumps by their three parameters i , θ and s .
4. Following 3), list the blending weights of these three decision stumps. Explain how their blending weights are decided and what are their actual values in the program?

Note:

- You need to hand in the report to answer above questions by your own words. Providing program code segments in your report to facilitate your explanation is encouraged. However, you CANNOT just list codes without explanations.

.(請以中文撰寫報告)

- Please format the file name as: Student ID_proj1_verNo, ex : 602410143_proj1_v1 • No copy! Late policy applies.