

Homework 4

(due Tuesday, October 9th, 2018, 02:00)

NOTE: DIFFERENT DEADLINE THAN IN THE PAST

1. Griffel 7.1, 7.2, 7.9 [(a) and (b) only] and 7.11
2. Multi-class Linear Classifier

- Download the Iris dataset available at the UCI Machine Learning repository in the platform of your choice.
- Execute a homegrown multi-class least-squares classifier on the Iris dataset after separating it into training and test set patterns.
- Document the training and testing mis-classification errors and separate out each class errors using a confusion matrix (3×3 with diagonal values being true positives).
- Document the settings of the free parameters (if any). Give a high level summary of your findings based on your interpretation of the results.
- The ratios attempted for training and testing should be 12% training/88% testing, 30% training/70% testing and 50% training/50% testing (and these percentages should be class specific as much as possible). There is no need to perform cross-validation.
- Include the source code and printouts in your submitted homework. Add a link to the pdf if you wish.