

TDDE01 – Machine Learning

Group 9 Laboration Report 4

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Assignment 1

Fluff

0.1 Raw data analysis

- Plot the data
- Reorder the data

0.2 Regression tree

- Show the regression tree model
- Report the selected tree
- Plot the predictions and raw data
- Plot the residuals histogram

0.3 non-parametric bootstrap

- Show the non parametric function
- Show the bootstrap function
- Show the confidence bounds plot
- Questions

0.4 parametric bootstrap

- Show the parametric function
- Show the bootstrap function
- Show the confidence and prediction bounds
- Questions

Assignment 2

Fluff

0.5 Principle component analysis

- Show the data
- Show the PCA function (which components were chosen?)
- Show the trace plot and loadings plot
- Questions

0.6 Independent component analysis

- Show the ICA function (which components were chosen?)
- Show the trace and loadings plot
- Questions

0.7 Cross validation for PCA

- Show the cross validation function
- Show the result?
- Questions

References

- [FHT09] Jerome Friedman, Trevor Hastie, and Robert Tibshirani. *The Elements of Statistical Learning*. Springer series in statistics, Berlin, second (11th) edition, 2009.

Appendix