Statistical Learning Literature

Compiled by Edoardo Costantini

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Books

Friedman, J., Hastie, T., & Tibshirani, R. (2001). *The elements of statistical learning* (Vol. 1) (No. 10). Springer series in statistics New York.

> The book offers a more in-depth discussion of most (and more) of the methods of James et al (2013).

James, G., Witten, D., Hastie, T., & Tibshirani, R. (2013). *An introduction to statistical learning* (Vol. 112). Springer.

> A great introduction to statistical learning. The book covers the basics of all the fundamental statistical learning techniques: linear and logistic regression (with related subset selection, regularisation, dimension reduction, etc.), classification tasks, polynomial regression, splines, local regression, generalised additive models, trees, SVM. It focuses on supervised learning as it only discusses two unsupervised techniques: PCA and K-means (Chapter 10).
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> Each chapter is supplemented with extensive lab sessions (with R code!) that show how to apply the methods.
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> Check out the online lectures that accompany the book (section by section!).

Ensemble Methods

Breiman, L. (2001). Random forests. *Machine learning*, *45*(1), 5–32.

> The reference paper for the implementation of the Random Forest algorithm.