

## Book Reviews/Reseñas Bibliográficas

### **Bayesian Nonparametric Data Analysis**

Müller, P., Quintana, F.A., Jara, A. & Hanson, T. (2015)

Springer

XIV, 193

ISBN 978-3-319-18968-0

The usual Bayesian is based on the knowledge of the distribution of the parameters. Hence thinking in non parametric methods in the Bayes context seems to be a contradiction for newcomers. Nevertheless, nonparametric Bayesian statistics provides of useful data analysis tool. This oeuvre provides a look from the data analysis perspective and does not use much of the contents in discussing probability models and properties.

The first chapter is an introduction and the next two are concerned with the density function estimates usage. The fourth one with regression. Are devoted to deal with particular problems, where Bayesian theory is a mill stone: Categorical Data, Survival Analysis, Hierarchical Models, Clustering and Feature Allocation. Finally, a discussion on other problems is the theme of the last chapter.

This book is recommended to persons dealing with non-classic statistic in different application areas.

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### **Multivariate Statistics. Exercises and Solutions**

Härdle, W. K. Hlávka, Z. (2015)

Springer-Verlag

ISBN 978-3-642-36004-6

XXIV, 362

ISBN 978-3-642-36005-3

- The book presents the theory, methods and tools needed for analyzing multivariate data analysis. Its kernel is the development of exercises providing their solutions and computer outputs. A part of it develops graphical techniques and the second one treats the issues on the properties of multivariate random variables and its probabilistic properties (Multivariate Distributions, Theory of the Multinomial) which support the discussions of estimation and testing hypothesis (Theory of Estimation, Hypothesis Testing). The following part (Principal Component Analysis, Factor Analysis, Cluster Analysis, Discriminant Analysis, Correspondence Analysis, Canonical Correlation Analysis, Multidimensional Scaling, Conjoint Measurement Analysis, Applications in Finance, Highly Interactive, Computationally Intensive Techniques) presents a good set of exercises which illustrate common problems arising in multivariate data analysis.

The mathematics is maintained at the necessary level using only calculus, matrix algebra. A Short Excursion into Matrix Algebra, Moving to Higher Dimensions and Decomposition of Data Matrices by Factors are the chapters devoted to doing mathematics.

The book presents more than 250 solved exercises. Hence, it will be a good source for the teachers and students that are coping with multivariate analysis courses. The exercises and data sets are included in the library SMSdata, [www.quantlet.org](http://www.quantlet.org) and in any case they can be obtained at the Springer webpage.

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