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Generalized additive models. An introduction with R. (English) Zbl 1087.62082

Chapman & Hall/CRC Texts in Statistical Science Series. Boca Raton, FL: Chapman & Hall/CRC (ISBN 1-58488-474-6/hbk). xvii, 391 p. (2006).

The aim of this book is to present a comprehensive introduction to linear, generalized linear, generalized additive and mixed models. Moreover, the book contains explanations of the theory underlying the statistical methods and material on statistical modelling in R. The book is written to be accessible and the author used a fairly smooth way even in the case of advanced statistical notions.

The book is intended as a text both for the students from the last two years of an undergraduate math/statistics programme upwards and researchers. The prerequisite is an honest course in probability and statistics. Finally, let us note that the book includes some practical examples illustrating the theory and corresponding exercises. The appendix is devoted to some matrix algebra.

Reviewer: [Florin Gorunescu \(Craiova\)](#)

MSC:

- 62J12 Generalized linear models (logistic models)
- 62-04 Software, source code, etc. for problems pertaining to statistics
- 62-01 Introductory exposition (textbooks, tutorial papers, etc.) pertaining to statistics

Cited in 2 Reviews Cited in 205 Documents
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Keywords:

generalized linear models; splines; mixed models

Software:

MEMSS; gamair; R; gss; S-PLUS; GAMS; GAMLSS; SemiPar