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   Nota di contenuto   Introduction -- Penalized Splines -- Generalized Additive Models --
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                       Function Extensions -- Selection of Additional Topics.-Index.

   Sommario/riassunto This easy-to-follow applied book expands upon the authors' prior
                       work on semiparametric regression to include the use of R software. In
                       2003, authors Ruppert and Wand co-wrote Semiparametric Regression
                       with R.J. Carroll, which introduced the techniques and benefits of
                       semiparametric regression in a concise and user-friendly fashion.
                       Fifteen years later, semiparametric regression is applied widely,
                       powerful new methodology is continually being developed, and
                       advances in the R computing environment make it easier than ever
                       before to carry out analyses. Semiparametric Regression with R
                       introduces the basic concepts of semiparametric regression with a
                       focus on applications and R software. This volume features case studies
                       from environmental, economic, financial, and other fields. The
                       examples and corresponding code can be used or adapted to apply
                       semiparametric regression to a wide range of problems. It contains
                       more than fifty exercises, and the accompanying HRW package contains

all datasets and scripts used in the book, as well as some useful R functions. This book is suitable as a textbook for advanced undergraduates and graduate students, as well as a guide for statistically-oriented practitioners, and could be used in conjunction with Semiparametric Regression. Readers are assumed to have a basic knowledge of R and some exposure to linear models. For the underpinning principles, calculus-based probability, statistics, and linear algebra are desirable.