Título:

Autor:

Editorial:

Tema:

Sinopsis

Precio: $1356.30

Año: 2012

Edición: 1ª

ISBN: 9781461405733

Construction of various models of objects under uncertainty is one of the most important problems in modern decision making theory. Regression models are some of the most prevalent tools for modeling under uncertainty and are widely applied in different branches of science such as in industrial research, agriculture, medicine, and business and economics. Regression Analysis Under A Priori Parameter Restrictions will be of interest to a broad spectrum of readers in applied mathematics, mathematical statistics, identification theory, systems analysis, econometrics, finance, optimization, and other scientific disciplines. Requiring a background in algebra, probability theory, mathematical statistics, and mathematical programming, this work may also be a useful supplement for advanced graduate courses in estimation theory, regression analysis, mathematical statistics, econometrics, mathematical programming and optimal control, and stochastic optimization.

The material contained in this monograph successfully combines interesting theoretical results with methods and algorithms for solving practical problems. It focuses on the construction of regression models with linear and non-linear constraint inequalities and is the first book in which the theoretical results lying in the background of construction and studying regression models with inequality constraints on parameters are presented systematically and solidly.

Problems are described and studied in a clear, precise, and rigorous method and include: calculation of estimates for regression parameters, determination of their asymptotic properties and accuracy of estimation, point and interval prediction by the regression, parameters of which are estimated under inequality constraints. The authors' approach lends itself to numerous applications in various practical problems, several of which are discussed in detail.