

Book Reviews | Reseñas

STATISTICS: PRINCIPLES AND METHODS, 8TH EDITION

Richard A. Johnson, Gouri K. Bhattacharyya (2019)
Wiley
XXI +576pp
ISBN: 978-1-119-49705-9

This new edition of Statistics: Principles and Methods is a good text book for statistical courses in business. Readers will obtain what is needed for dealing with concepts, terminology, and methods. The theory is balanced with the use of real-world data for illustrating how the concepts are of use in for comprehending statistical outputs. Mathematics is maintained a low level and logical reasoning is mainly used for introducing methods and software.

E. Sarkar
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LINEAR AND CONVEX OPTIMIZATION: A MATHEMATICAL APPROACH

Michael H. Veatch (2020)
Wiley
XIX+384
ISBN: 978-1-119-66405-5

The book presents the theoretical supports of Linear and Convex Optimization unifiedly within optimization theory, providing key insights on problem structuring, modeling, and algorithm development. Existing algorithms for solving linear, integer, and convex optimization are presented in an agreeable mathematical discussions, together with insights into algorithms. The principles of algorithm designing and the role and the computation speed of algorithms are discussed. Discussions on applications, illustrating the practical impacts of solving optimization problems, are addressed throughout.

J. M. Sautto
UAGro

MULTI-PARAMETRIC OPTIMIZATION AND CONTROL

Efstratios N. Pistikopoulos, Nikolaos A. Diangelakis, Richard Oberdieck (2020)
Wiley
ISBN: 978-1-119-26519-1

xvii+ 320

The authors present multi-parametric optimization and control issues including a series of recent developments and real-world applications. An overview on the theory and algorithmic solutions for multi-parametric programming is followed by discussions on connections between multi-parametric programming

and model-predictive control. Then, the authors deal with multi-parametric optimization in process systems engineering. Different case studies illustrate, through real-world applications solving, the role of the concepts.

M. Lavoilles
M & M Ingénierie Industriels École.

SURROGATES: GAUSSIAN PROCESS MODELING, DESIGN, AND OPTIMIZATION FOR THE APPLIED SCIENCES

Robert B. Gramacy (2020)
ISBN 9780367415426
Chapman and Hall/CRC

XVIII+559.

This is a text for graduate and advanced students and targets practitioners in technology, physical, and biological sciences as of course to mathematicians. It is organized into 10 chapters and 2 appendixes. It uses response surface methodologies for modeling Gaussian process. It may be recommended as a handbook for teaching interrelated topics of machine learning, spatial statistics, computer simulation, meta-modeling, design of experiments, and optimization as well as in simulation with statistical tools, management of dynamic processes, etc. The author reinforced issues in prediction, uncertainty and covers what is needed of Gaussian Process for dealing with computer simulation experiments. The discussions are completed with many R examples and the R-codes.

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