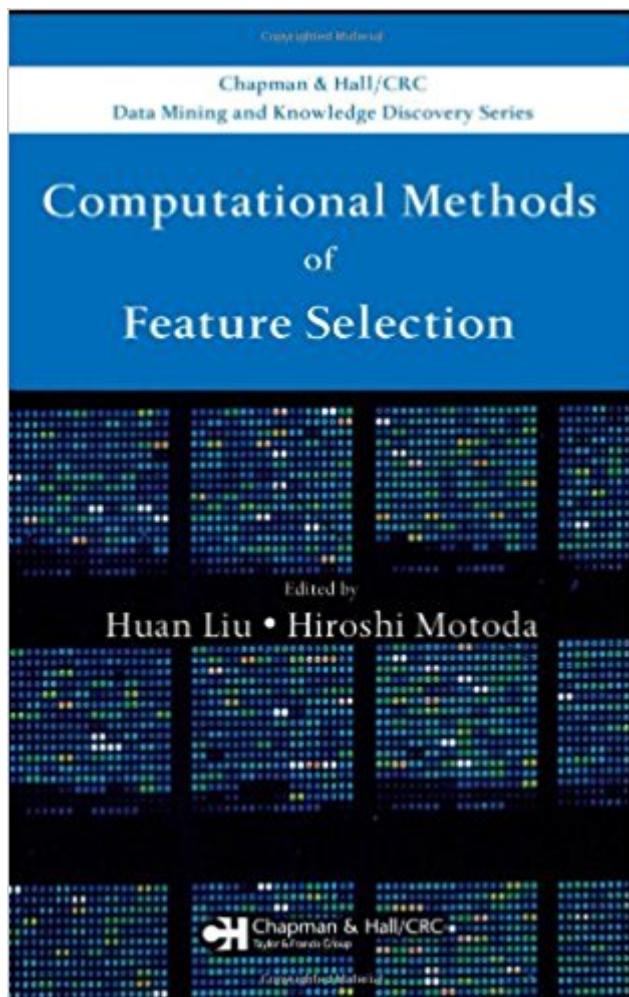


The book was found

# Computational Methods Of Feature Selection (Chapman & Hall/CRC Data Mining And Knowledge Discovery Series)



## Synopsis

Due to increasing demands for dimensionality reduction, research on feature selection has deeply and widely expanded into many fields, including computational statistics, pattern recognition, machine learning, data mining, and knowledge discovery. Highlighting current research issues, Computational Methods of Feature Selection introduces the basic concepts and principles, state-of-the-art algorithms, and novel applications of this tool. The book begins by exploring unsupervised, randomized, and causal feature selection. It then reports on some recent results of empowering feature selection, including active feature selection, decision-border estimate, the use of ensembles with independent probes, and incremental feature selection. This is followed by discussions of weighting and local methods, such as the ReliefF family, k-means clustering, local feature relevance, and a new interpretation of Relief. The book subsequently covers text classification, a new feature selection score, and both constraint-guided and aggressive feature selection. The final section examines applications of feature selection in bioinformatics, including feature construction as well as redundancy-, ensemble-, and penalty-based feature selection. Through a clear, concise, and coherent presentation of topics, this volume systematically covers the key concepts, underlying principles, and inventive applications of feature selection, illustrating how this powerful tool can efficiently harness massive, high-dimensional data and turn it into valuable, reliable information.

## Book Information

Series: Chapman & Hall/CRC Data Mining and Knowledge Discovery Series

Hardcover: 440 pages

Publisher: Chapman and Hall/CRC (October 29, 2007)

Language: English

ISBN-10: 1584888784

ISBN-13: 978-1584888789

Product Dimensions: 6.5 x 1.1 x 9.3 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ  See all reviewsÂ  (1 customer review)

Best Sellers Rank: #1,851,848 in Books (See Top 100 in Books) #276 inÂ  Books > Science & Math > Mathematics > Number Systems #768 inÂ  Books > Computers & Technology > Networking & Cloud Computing > Network Administration > Storage & Retrieval #877 inÂ  Books > Computers & Technology > Databases & Big Data > Data Mining

## Customer Reviews

Table of Contents PREFACE INTRODUCTION AND BACKGROUND LESS IS MORE Huan Liu and Hiroshi Motoda Background and Basics Supervised, Unsupervised, and Semi-Supervised Feature Selection Key Contributions and Organization of the Book Looking Ahead UNSUPERVISED FEATURE SELECTION Jennifer G. Dy Introduction Clustering Feature Selection Feature Selection for Unlabeled Data Local Approaches Summary RANDOMIZED FEATURE SELECTION David J.

[Download to continue reading...](#)

Computational Methods of Feature Selection (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Data Classification: Algorithms and Applications (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Discovering Knowledge in Data: An Introduction to Data Mining (Wiley Series on Methods and Applications in Data Mining) Image Processing and Acquisition using Python (Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series) Algorithms in Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical and Computational Biology) Introduction to Computational Biology: Maps, Sequences and Genomes (Chapman & Hall/CRC Interdisciplinary Statistics) Computational Partial Differential Equations Using MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) The Garbage Collection Handbook: The Art of Automatic Memory Management (Chapman & Hall/CRC Applied Algorithms and Data Structures series) Graphics for Statistics and Data Analysis with R (Chapman & Hall/CRC Texts in Statistical Science) Group Sequential Methods with Applications to Clinical Trials (Chapman & Hall/CRC Interdisciplinary Statistics) Big Data For Beginners: Understanding SMART Big Data, Data Mining & Data Analytics For improved Business Performance, Life Decisions & More! The Complete Book of Feature Writing: From Great American Feature Writers, Editors and Teachers Numerical Techniques for Direct and Large-Eddy Simulations (Chapman & Hall/CRC Numerical Analysis and Scientific Computing Series) Introduction to Modern Cryptography: Principles and Protocols (Chapman & Hall/CRC Cryptography and Network Security Series) Introduction to Modern Cryptography, Second Edition (Chapman & Hall/CRC Cryptography and Network Security Series) Introduction to Network Security (Chapman & Hall/CRC Computer and Information Science Series) Bayesian Designs for Phase I-II Clinical Trials (Chapman & Hall/CRC Biostatistics Series) Gender Selection: The Complete Guide: Choose the Sex of Your Baby with Easy and Proven Natural Methods (Gender Selection Methods) The Kurzweil-Henstock Integral and Its Differential: A Unified Theory of Integration on R and Rn (Chapman & Hall/CRC Pure and Applied Mathematics) Web 2.0 and Beyond: Principles and

