

decision-making Complete coverage of the wide variety of statistical techniques that can be performed using the SEMMA nodes An accompanying Web site that provides downloadable Score code, training code, and data sets for further implementation, manipulation, and interpretation as well as SAS/IML software programming code This book is a well-crafted study guide on the various methods employed to randomly sample, partition, graph, transform, filter, impute, replace, cluster, and process data as well as interactively group and iteratively process data while performing a wide variety of modeling techniques within the process flow of the SAS Enterprise Miner software. Data Mining Using SAS Enterprise Miner is suitable as a supplemental text for advanced undergraduate and graduate students of statistics and computer science and is also an invaluable, all-encompassing guide to data mining for novice statisticians and experts alike.

Domain Driven Data Mining

Concept Lattices

Data Mining and Analysis

Data Mining Using SAS Enterprise Miner

Principles of Data Mining

The fundamental algorithms in data mining and machine learning form the basis of data science, utilizing automated methods to analyze patterns and models for all kinds of data in applications ranging from scientific discovery to business analytics. This textbook for senior undergraduate and graduate courses provides a comprehensive, in-depth overview of data mining, machine learning and statistics, offering solid guidance for students, researchers, and practitioners. The book lays the foundations of data analysis, pattern mining, clustering, classification and regression, with a focus on the algorithms and the underlying algebraic, geometric, and probabilistic concepts. New to this second edition is an entire part devoted to regression methods, including neural networks and deep learning.

Now in its second edition, this book focuses on practical algorithms for mining data from even the largest datasets.

Presents the latest techniques for analyzing and extracting information from large amounts of data in high-dimensional data spaces The revised and updated third edition of Data Mining contains in one volume an introduction to a systematic approach to the analysis of large data sets that integrates results from disciplines such as statistics, artificial intelligence, data bases, pattern recognition, and computer visualization. Advances in deep learning technology have opened an entire new spectrum of applications. The author—a noted expert on the topic—explains the basic concepts, models, and methodologies that have been developed in recent years. This new edition introduces and expands on many topics, as well as providing revised sections on software tools and data mining applications. Additional changes include an updated list of references for further study, and an extended list of problems and questions that relate to each chapter.This third edition presents new and expanded information that:

- Explores big data and cloud computing
- Examines deep learning
- Includes information on convolutional neural networks (CNN)
- Offers reinforcement learning
- Contains semi-supervised learning and S3VM
- Reviews model evaluation for unbalanced data

Written for graduate students in computer science, computer engineers, and computer information systems professionals, the updated third edition of Data Mining continues to provide an essential guide to the basic principles of the technology and the most recent developments in the field.

Mining of Data with Complex Structures explores nature of data with complex structure including sequences, trees and graphs. Readers will find a detailed description of the state-of-the-art of sequence mining, tree mining and graph mining, and more.

Formal Concept Analysis

Concepts and Techniques, 3rd Edition

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Data Preparation for Data Mining

Algorithms and Theory of Computation Handbook, Second Edition, Volume 1

Our ability to generate and collect data has been increasing rapidly. Not only are all of our business, scientific, and government transactions now computerized, but the widespread use of digital cameras, publication tools, and bar codes also generate data. On the collection side, scanned text and image platforms, satellite remote sensing systems, and the World Wide Web have flooded us with a tremendous amount of data. This explosive growth has generated an even more urgent need for new techniques and automated tools that can help us transform this data into useful information and knowledge. Like the first edition, voted the most popular data mining book by KD Nuggets readers, this book explores concepts and techniques for the discovery of patterns hidden in large data sets, focusing on issues relating to their feasibility, usefulness, effectiveness, and scalability. However, since the publication of the first edition, great progress has been made in the development of new data mining methods, systems, and applications. This new edition substantially enhances the first edition, and new chapters have been added to address recent developments on mining complex types of data—including stream data, sequence data, graph structured data, social network data, and multi-relational data. A comprehensive, practical look at the concepts and techniques you need to know to get the most out of real business data Updates that incorporate input from readers, changes in the field, and more material on statistics and machine learning Dozens of algorithms and implementation examples, all in easily understood pseudo-code and suitable for use in real-world, large-scale data mining projects Complete classroom support for instructors at www.mkp.com/datamining2e companion site

Data Mining: Concepts and Techniques provides the concepts and techniques in processing gathered data or information, which will be used in various applications. Specifically, it explains data mining and the tools used in discovering knowledge from the collected data. This book is referred as the knowledge discovery from data (KDD). It focuses on the feasibility, usefulness, effectiveness, and scalability of techniques of large data sets. After describing data mining, this edition explains the methods of knowing, preprocessing, processing, and warehousing data. It then presents information about data warehouses, online analytical processing (OLAP), and data cube technology. Then, the methods involved in mining frequent patterns, associations, and correlations for large data sets are described. The book details the methods for data classification and introduces the concepts and methods for data clustering. The remaining chapters discuss the outlier detection and the trends, applications, and research frontiers in data mining. This book is intended for Computer Science students, application developers, business professionals, and researchers who seek information on data mining. Presents dozens of algorithms and implementation examples, all in pseudo-code and suitable for use in real-world, large-scale data mining projects Addresses advanced topics such as mining object-relational databases, spatial databases, multimedia databases, time-series databases, text databases, the World Wide Web, and applications in several fields Provides a comprehensive, practical look at the concepts and techniques you need to get the most out of your data.

R and Data Mining introduces researchers, post-graduate students, and analysts to data mining using R, a free software environment for statistical computing and graphics. The book provides practical methods for using R in applications from academia to industry to extract knowledge from vast amounts of data. Readers will find this book a valuable guide to the use of R in tasks such as classification and prediction, clustering, outlier detection, association rules, sequence analysis, text mining, social network analysis, sentiment analysis, and more. Data mining techniques are growing in popularity in a broad range of areas, from banking to insurance, retail, telecom, medicine, research, and government. This book focuses on the modeling phase of the data mining process, also addressing data exploration and model evaluation. With three in-depth case studies, a quick reference guide, bibliography, and links to a wealth of online resources, R and Data Mining is a valuable, practical guide to a powerful method of analysis. Presents an introduction into using R for data mining applications, covering most popular data mining techniques Provides code examples and data so that readers can easily learn the techniques Features case studies in real-world applications to help readers apply the techniques in their work

This book offers state-of-the-art research and development outcomes on methodologies, techniques, approaches and successful applications in domain driven, actionable knowledge discovery. It bridges the gap between business expectations and research output.

Discrimination and Privacy in the Information Society

Data Mining: Concepts And Techniques, 2E

General Concepts and Techniques

Mathematical Foundations

Data Mining: Concepts and Techniques

Data Mining for Business Analytics: Concepts, Techniques, and Applications in XLMiner®, Third Edition presents an applied approach to data mining and predictive analytics with clear exposition, hands-on exercises, and real-life case studies. Readers will work with all of the standard data mining methods using the Microsoft® Office Excel® add-in XLMiner® to develop predictive models and learn how to obtain business value from Big Data. Featuring updated topical coverage on text mining, social network analysis, collaborative filtering, ensemble methods, uplift modeling and more, the Third Edition also includes: Real-world examples to build a theoretical and practical understanding of key data mining methods End-of-chapter exercises that help readers better understand the presented material Data-rich case studies to illustrate various applications of data mining techniques Completely new chapters on social network analysis and text mining A companion site with additional data sets, instructors material that include solutions to exercises and case studies, and Microsoft PowerPoint® slides <https://www.dataminingbook.com> Free 140-day license to use XLMiner for Education software Data Mining for Business Analytics: Concepts, Techniques, and Applications in XLMiner®, Third Edition is an ideal textbook for upper-undergraduate and graduate-level courses as well as professional programs on data mining, predictive modeling, and Big Data analytics. The new edition is also a unique reference for analysts, researchers, and practitioners working with predictive analytics in the fields of business, finance, marketing, computer science, and information technology. Praise for the Second Edition "...full of vivid and thought-provoking anecdotes... needs to be read by anyone with a serious interest in research and marketing."—Research Magazine "Shmueli et al. have done a wonderful job in presenting the field of data mining - a welcome addition to the literature." – ComputingReviews.com "Excellent choice for business analysts...The book is a perfect fit for its intended audience." – Keith McCormick, Consultant and Author of SPSS Statistics For Dummies, Third Edition and SPSS Statistics for Data Analysis and Visualization Galit Shmueli, PhD, is Distinguished Professor at National Tsing Hua University's Institute of Service Science. She has designed and instructed data mining courses since 2004 at University of Maryland, Statistics.com, The Indian School of Business, and National Tsing Hua University, Taiwan. Professor Shmueli is known for her research and teaching in business analytics, with a focus on statistical and data mining methods in information systems and healthcare. She has authored over 70 journal articles, books, textbooks and book chapters. Peter C. Bruce is President and Founder of the Institute for Statistics Education at www.statistics.com. He has written multiple journal articles and is the developer of Resampling Stats software. He is the author of Introductory Statistics and Analytics: A Resampling Perspective, also published by Wiley. Nitin R. Patel, PhD, is Chairman and cofounder of Cytel, Inc., based in Cambridge, Massachusetts. A Fellow of the American Statistical Association, Dr. Patel has also served as a Visiting Professor at the Massachusetts Institute of Technology and at Harvard University. He is a Fellow of the Computer Society of India and was a professor at the Indian Institute of Management, Ahmedabad for 15 years.

Data Preparation for Data Mining addresses an issue unfortunately ignored by most authorities on data mining: data preparation. Thanks largely to its perceived difficulty, data preparation has traditionally taken a backseat to the more alluring question of how best to extract meaningful knowledge. But without adequate preparation of your data, the return on the resources invested in mining is certain to be disappointing. Dorian Pyle corrects this imbalance. A twenty-five-year veteran of what has become the data mining industry, Pyle shares his own successful data preparation methodology, offering both a conceptual overview for managers and complete technical details for IT professionals. Apply his techniques and watch your mining efforts pay off-in the form of improved performance, reduced distortion, and more valuable results. On the enclosed CD-ROM, you'll find a suite of programs as C source code and compiled into a command-line-driven toolkit. This code illustrates how the author's techniques can be applied to arrive at an automated preparation solution that works for you. Also included are demonstration versions of three commercial products that help with data preparation, along with sample data with which you can practice and experiment. * Offers in-depth coverage of an essential but largely ignored subject. * Goes far beyond theory, leading you-step by step-through the author's own data preparation techniques. * Provides practical illustrations of the author's methodology using realistic sample data sets. * Includes algorithms you can apply directly to your own project, along with instructions for understanding when automation is possible and when greater intervention is required. * Explains how to identify and correct data problems that may be present in your application. * Prepares miners, helping them head into preparation with a better understanding of data sets and their limitations.

Data mining is becoming a pervasive technology in activities as diverse as using historical data to predict the success of a marketing campaign, looking for patterns in financial transactions to discover illegal activities or analyzing genome sequences. From this perspective, it was just a matter of time for the discipline to reach the important area of computer security. Applications Of Data Mining In Computer Security presents a collection of research efforts on the use of data mining in computer security. Applications Of Data Mining In Computer Security concentrates heavily on the use of data mining in the area of intrusion detection. The reason for this is twofold. First, the volume of data dealing with both network and host activity is so large that it makes it an ideal candidate for using data mining techniques. Second, intrusion detection is an extremely critical activity. This book also addresses the application of data mining to computer forensics. This is a crucial area that seeks to address the needs of law enforcement in analyzing the digital evidence.

Data Mining: Concepts and TechniquesElsevier

Advances in Electrical Engineering and Computational Science

Practical Machine Learning Tools and Techniques with Java Implementations

Exploratory Data Mining and Data Cleaning

数据挖掘/概念与技术/英文版/经典原版书库/Data mining

Data Mining for Business Analytics

This text surveys research from the fields of data mining and information visualisation and presents a case for techniques by which information visualisation can be used to uncover real knowledge hidden away in large databases.

Information Visualization in Data Mining and Knowledge Discovery

9th Industrial Conference, ICDM 2009, Leipzig, Germany, July 20 - 22, 2009. Proceedings

Data Mining: Know It All