Cluster Analysis Using Sas Enterprise Guide

Text addresses such tasks as: viewing analytic data preparation in the context of its business environment, identifying the specifics of predictive modeling for data mart creation, understanding the concepts and considerations of data preparation for time series analysis, and using SAS procedures for scoring.

New and updated for SAS Enterprise Guide 4.2! In this pragmatic, example-driven book, author Neil Constable demonstrates how you can use SAS code to enhance the capabilities of SAS Enterprise Guide. Designed to help you gain extra value from the products you already have, SAS Programming for Enterprise Guide Users contains tips and techniques that show you a variety of features that cannot be accessed directly through the task interfaces. In all cases, techniques are shown with examples that you can try and test, plus additional exercises are included to give you more practice. The end result is more efficient and resilient use of SAS Enterprise Guide in a wider variety of business areas. Included is a discussion of the following subject areas: the Output Delivery System, advanced formatting, macro variables and macros, advanced reporting using PROC REPORT, highlighting in reports, hyperlinking between reports and graphs, data manipulation using SQL, data manipulation using the DATA step, extended graphics. By adding small amounts of code in key areas, SAS Enterprise Guide users can get more out of the product than the tasks reveal. Users should be familiar with the SAS Enterprise Guide user interface and tasks. No programming experience is necessary. This book is part of the SAS Press program.

Statistical Data Mining Using SAS Applications, Second Edition describes statistical data mining concepts and demonstrates the features of user-friendly data mining SAS tools. Integrating the statistical and graphical analysis tools available in SAS systems, the book provides complete statistical data mining solutions without writing SAS program co

Learn data science concepts with real-world examples in SAS! End-to-End Data Science with SAS: A Hands-On Programming Guide provides clear and practical explanations of the data science environment, machine learning techniques, and the SAS programming knowledge necessary to develop machine learning models in any industry. The book covers concepts including understanding the business need, creating a modeling data set, linear regression, parametric classification models, and non-parametric classification models. Real-world business examples and example code are used to demonstrate each process step-by-step. Although a significant amount of background information and supporting mathematics are presented, the book is not structured as a textbook, but rather it is a user’s guide for the application of data science and machine learning in a business environment. Readers will learn how to think like a data scientist, wrangle messy data, choose a model, and evaluate the model’s effectiveness. New data scientists or professionals who want more experience with SAS will find this book to be an invaluable reference. Take your data science career to the next level by mastering SAS programming for machine learning models.

This book is written for students in higher education. Instructors teaching predictive analytics courses can assign this book to their students to expose them to predictive analytics techniques using SAS Enterprise Miner. The book is developed using SAS Enterprise Miner 14.3, but it should apply to other versions with little to no changes. This book does not require students to have any previous knowledge of SAS Enterprise Miner. It walks students through the predictive analytics process using step-by-step by instructions. Even though the contents of this book can be completed by anyone who has access to SAS Enterprise Miner, knowledge of predictive analytics concepts is essential. Also, this book is not a substitute for any lecture or textbook. It is best if this book is used in parallel to lectures.

This book is designed in making statisticians, researchers, and programmers aware of the awesome new product now available in SAS called Enterprise Miner. The book will also make readers get familiar with the neural network forecasting methodology in statistics. One of the goals to this book is making the powerful new SAS module called Enterprise Miner easy for you to use with step-by-step instructions in creating a Enterprise Miner process flow diagram in preparation to data-mining analysis and neural network forecast modeling. Topics discussed in this book An overview to traditional regression modeling. An overview to neural network modeling. Numerical examples of various neural network designs and optimization techniques. An overview to the powerful SAS product called Enterprise Miner. An overview to the SAS neural network modeling procedure called PROC NEURAL. Designing a SAS Enterprise Miner process flow diagram to perform neural network forecast modeling and traditional regression modeling with an explanation to the various configuration settings to the Enterprise Miner nodes used in the analysis. Comparing neural network forecast modeling estimates with traditional modeling estimates based on various examples from SAS manuals and literature with an added overview to the various modeling designs and a brief explanation to the SAS modeling procedures, option statements, and corresponding SAS output listings.

A working guide that uses real-world data, this step-by-step resource will show you how to segment customers more intelligently and achieve the one-to-one customer relationship that your business needs. --

This book organizes key concepts, theories, standards, methodologies, trends, challenges and applications of data mining and knowledge discovery in databases. It first surveys, then provides comprehensive yet concise algorithmic descriptions of methods, including classic methods plus the extensions and novel methods developed recently. It also gives in-depth descriptions of data mining applications in various interdisciplinary industries.

Applied Data Mining for Forecasting Using SAS, by Tim Rey, Arthur Kordon, and Chip Wells, introduces and describes approaches for mining large time series data sets. Written for forecasting practitioners, engineers, statisticians, and economists, the book details how to select useful candidate input variables for time series regression models in environments when the number of candidates is large, and identifies the correlation structure between selected candidate inputs and the forecast variable. This book is essential for forecasting practitioners who need to understand the practical issues involved in applied forecasting in a business setting. Through numerous real-world examples, the authors demonstrate how to effectively use SAS software to meet their industrial forecasting needs. This book is part of the SAS Press program.

Understanding your customers is the key to your company’s success! Segmentation is one of the first and most basic machine learning methods. It can be used by companies to understand their customers better, boost relevance of marketing messaging, and increase efficacy of predictive models. In Customer Segmentation and Clustering Using SAS Enterprise Miner, Third Edition, Randy Collica explains, in step-by-step fashion, the most commonly available techniques for segmentation using the powerful data mining software SAS Enterprise Miner. A working guide that uses real-world data, this new edition will show you how to segment customers more intelligently and achieve the one-to-one customer relationship that your business needs. Step-by-step examples and exercises, using a number of machine learning and data mining techniques, clearly illustrate the concepts of segmentation and clustering in the context of customer relationship management. The book includes four parts, each of which increases in complexity. Part 1 reviews the basics of segmentation and clustering at an introductory level, providing examples from a variety of industries. Part 2 offers an in-depth treatment of segmentation with practical topics, such as when and how to update your models. Part 3 goes beyond

traditional segmentation practices to introduce recommended strategies for clustering product affinities, handling missing data, and incorporating textual records into your predictive model with SAS Text Miner. Finally, part 4 takes segmentation to a new level with advanced techniques, such as clustering of product associations, developing segmentation-scoring models from customer survey data, combining segmentations using ensemble segmentation, and segmentation of customer transactions. New to the third edition is a chapter that focuses on predictive models within microsegments and combined segments, and a new parallel process technique is introduced using SAS Factory Miner. In addition, all examples have been updated to the latest version of SAS Enterprise Miner.

Data visualization enables decision makers to see analytics presented visually so that they can grasp difficult concepts or identify new patterns. SAS offers several solutions for visualizing your data, many of which are powered by SAS Viya. This book includes four visualization solutions powered by SAS Viya: SAS Visual Analytics, SAS Visual Statistics, SAS Visual Text Analytics, and SAS Visual Investigator. SAS visualization software is designed for anyone in your organization who wants to use and derive insights from data-from influencers, decision makers, and analysts to statisticians and data scientists. Also available as a free e-book from sas.com/books.

Analytics offers many capabilities and options to measure and improve data quality, and SAS is perfectly suited to these tasks. Gerhard Svolba's Data Quality for Analytics Using SAS focuses on selecting the right data sources and ensuring data quantity, relevancy, and completeness. The book is made up of three parts. The first part, which is conceptual, defines data quality and contains text, definitions, explanations, and examples. The second part shows how the data quality status can be profiled and the ways that data quality can be improved with analytical methods. The final part details the consequences of poor data quality for predictive modeling and time series forecasting.

SAS Institute implements data mining in Enterprise Miner software, which will be used in this book focused in Cluster Analysis and Decision Trees. SAS Institute defines the concept of Data Mining as the process of selecting (Selecting), explore (Exploring), modify (Modifying), modeling (Modeling) and rating (Assessment) large amounts of data with the aim of uncovering unknown patterns which can be used as a comparative advantage with respect to competitors. This process is summarized with the acronym SEMMA which are the initials of the 5 phases which comprise the process of Data Mining according to SAS Institute."

See how data science can answer the questions your business faces! Applying Data Science: Business Case Studies Using SAS, by Gerhard Svolba, shows you the benefits of analytics, how to gain more insight into your data, and how to make better decisions. In eight entertaining and real-world case studies, Svolba combines data science and advanced analytics with business questions, illustrating them with data and SAS code. The case studies range from a variety of fields, including performing headcount survival analysis for employee retention, forecasting the demand for new projects, using Monte Carlo simulation to understand outcome distribution, among other topics. The data science methods covered include Kaplan-Meier estimates, Cox Proportional Hazard Regression, ARIMA models, Poisson regression, imputation of missing values, variable clustering, and much more! Written for business analysts, statisticians, data miners, data scientists, and SAS programmers, Applying Data Science bridges the gap between high-level, business-focused books that skimp on the details and technical books that only show SAS code with no business context.

« Written for business analysts, data scientists, statisticians, students, predictive modelers, and data miners, this comprehensive text provides examples that will strengthen your understanding of the essential concepts and methods of predictive modeling. »--

Applied Data Mining for Forecasting Using SAS, by Tim Rey, Arthur Kordon, and Chip Wells, introduces and describes approaches for mining large time series data sets. Written for forecasting practitioners, engineers, statisticians, and economists, the book details how to select useful candidate input variables for time series regression models in environments when the number of candidates is large, and identifies the correlation structure between selected candidate inputs and the forecast variable.

The most thorough and up-to-date introduction to data mining techniques using SAS Enterprise Miner. The Sample, Explore, Modify, Model, and Assess (SEMMA) methodology of SAS Enterprise Miner is an extremely valuable analytical tool for making critical business and marketing decisions. Until now, there has been no single, authoritative book that explores every node relationship and pattern that is a part of the Enterprise Miner software with regard to SEMMA design and data mining analysis. Data Mining Using SAS Enterprise Miner introduces readers to a wide variety of data mining techniques and explains the purpose of-and reasoning behind-every node that is a part of the Enterprise Miner software. Each chapter begins with a short introduction to the assortment of statistics that is generated from the various nodes in SAS Enterprise Miner v4.3, followed by detailed explanations of configuration settings that are located within each node. Features of the book include: The exploration of node relationships and patterns using data from an assortment of computations, charts, and graphs commonly used in SAS procedures A step-by-step approach to each node discussion, along with an assortment of illustrations that acquaint the reader with the SAS Enterprise Miner working environment Descriptive detail of the powerful Score node and associated SAS code, which showcases the important of managing, editing, executing, and creating custom-designed Score code for the benefit of fair and comprehensive business 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.

Understanding the customer is critical to your company's success. In this instructive guide, Randy Collica employs SAS Enterprise Miner and the most commonly available techniques for customer relationship management (CRM). You will learn how to segment customers more intelligently and to achieve, or at least get closer to, the one-to-one customer relationship that today's businesses want. Step-by-step examples and exercises clearly illustrate the concepts of segmentation and clustering in the context of CRM. The book, with a foreword by Michael J. A. Berry, is sectioned into three parts. Part 1 reviews the basics of segmentation and clustering at an introductory level, providing examples from a variety of industries. Part 2 offers an in-depth treatment of segmentation with practical topics such as when and how to update your models and clustering with many attributes. Part 3 presents an introduction to newer, more advanced techniques, such as product affinity clustering, missing data imputation, and text mining segmentation. This straight-forward guide will appeal to anyone who seeks to better understand customers or prospective customers. Additionally, professors and students will find the book well suited for a business data mining analytics course in an MBA program or related course of study. You should understand basic statistics, but no prior knowledge of data mining or SAS Enterprise Miner is required. A foreword by Michael J. A. Berry is featured. Included on your bonus CD-ROM are the following: example SAS code, data sets, macros, and Enterprise Miner templates.

Many marketing researchers, companies and business schools need to use statistical procedures and accurately interpret the result, that's why the SAS® Enterprise Guide software, which uses a user-friendly drag-and-drop menu to extract statistical information, is so popular. Marketing Research with SAS Enterprise Guide includes 236 screen shots to provide a detailed explanation of the SAS® Enterprise Guide software. Based on a step-by-step approach and real managerial situations, it guides the reader to an understanding of the use of statistical methods. It demonstrates ways of extracting information, collating it to provide reliable knowledge, and how to use these insights to solve day-to-day business and research problems. SAS ® offers a stand-alone marketing research tool by means of the SAS® OnDemand Enterprise Guide solution for academics and business professionals. This straightforward, pragmatic reference manual will help: -

By now, it is commonly accepted that investments in information and communication technologies (ICTs) can facilitate macroeconomic growth in developed countries. Research standards in ICT for development (ICT4D) are high, and it is a basic expectation that a theoretically sound conceptual investigation should yield actionable results. An additional expectation is that an on-the-ground study conducted in each setting should add to the common body of knowledge based on theory. In other words, one is expected to make a connection between the world of concepts and the world of reality. Middle-range theories and frameworks could help connect the case studies with grand theories, by helping to create a theoretically sound and practically applicable research architecture of ICT4D. This book demonstrates how creative use of various data analysis methods (e.g., data mining [DM], data envelopment analysis [DEA], and structural equation modeling [SEM]) and conceptual frameworks (e.g., neoclassical growth accounting, chaos and complexity theories) may be utilized for inductive and deductive purposes to develop and to test, in step-by-step fashion, theoretically sound frameworks for a large subset of ICT4D research questions. Specifically, this book showcases the utilization of DM, DEA, and SEM for the following purposes: Identification of the relevant context-specific constructs (inductive application) Identification of the relationships between the constructs (inductive application) Development of a framework incorporating the constructs and relationships discovered (inductive application) Testing of the constructed framework (deductive application) The book takes a multi-theoretical perspective to economic development research. It starts with an overview of ICT4D. Next it covers such frameworks and theories as neoclassical growth accounting and the theory of complementarity, complex systems and chaos theories, and the product life cycle (PLC) theory. There are also nontechnical overviews of the DM and data analytic methods that can be used in this research. Also presented is evidence that human capital and investment capital are complementary and are reliable sources of economic growth. The book concludes with methodological frameworks to guide investment decisions and the formulation of strategic policy.

Soft computing techniques are widely used in most businesses. This book consists of several important papers on the applications of soft computing techniques for the business field. The soft computing techniques used in this book include (or very closely related to): Bayesian networks, biclustering methods, case-based reasoning, data mining, Dempster-Shafer theory, ensemble learning, evolutionary programming, fuzzy decision trees, hidden Markov models, intelligent agents, k-means clustering, maximum likelihood Hebbian learning, neural networks, opportunistic scheduling, probability distributions combined with Monte Carlo methods, rough sets, self organizing maps, support vector machines, uncertain reasoning, other statistical and machine learning techniques, and combinations of these techniques. The businesses or business problems addressed in this book include (or very closely related to): analysis of correlations between currency exchange rates, analysis of USA banks and Moody’s bank financial strength rating, arrears management, business risk identification, company audit fee evaluation, dental treatments, business internal control, intelligent tutoring systems and educational assessment, modeling agent behavior, motor insurance industry, personal loan defaults, pricing strategies for increasing the market share, pricing strategies in supply chain management, probabilistic sales forecasting, user relevance feedback analysis for online text retrieval, and world crude oil spot price forecasting.

In Customer Segmentation and Clustering Using SAS Enterprise Miner, Second Edition, Randy Collica employs SAS Enterprise Miner and the most commonly available techniques for customer relationship management (CRM). You will learn how to segment customers more intelligently and to achieve, or at least get closer to, the one-to-one customer relationship that today's businesses want. Step-by-step examples and exercises clearly illustrate the concepts of

segmentation and clustering in the context of CRM. The book is divided into four parts. Part 1 reviews the basics of segmentation and clustering at an introductory level, providing examples from a variety of industries. Part 2 offers an in-depth treatment of segmentation with practical topics such as when and how to update your models and clustering with many attributes. Part 3 goes beyond traditional segmentation practices to introduce recommended strategies for clustering product affinities, handling missing data, and incorporating textual records into your predictive model with SAS Text Miner software. Part 4 takes segmentation to a new level with advanced techniques such as clustering of product associations, developing segmentation scoring models from customer survey data, combining segmentations using ensemble segmentation, and segmentation of customer transactions. Updates to the second edition include four new chapters in Part 4, Chapters 13-16, that introduce new and advanced analytic techniques that can be valuable in many customer segmentation applications. In addition, Chapter 9 has a new section on using the Imputation node in SAS Enterprise Miner to accomplish missing data imputation, compared to PROC MI used in earlier sections of Chapter 9. Also included are business insights and motivations for selection settings and analytical decisions on many of the examples included in this second edition. This straightforward guide will appeal to anyone who seeks to better understand customers or prospective customers. Additionally, professors and students will find the book well suited for a business data mining analytics course in an MBA program or related course of study. You should understand basic statistics, but no prior knowledge of data mining or SAS Enterprise Miner is required.SAS Products and Releases: SAS Enterprise Miner

This book links up the theory of a selection of statistical procedures used in general practice with their application to real world data sets using the statistical software package SAS (Statistical Analysis System). These applications are intended to illustrate the theory and to provide, simultaneously, the ability to use the knowledge effectively and readily in execution.

Behavioral strategy continues to attract increasing research interest within the broader field of strategic management. Research in behavioral strategy has clear scope for development in tandem with such traditional streams of strategy research that involve economics, markets, resources, and technology. The key roles of psychology, organizational behavior, and behavioral decision making in the theory and practice of strategy have yet to be comprehensively grasped. Given that strategic thinking and strategic decision making are importantly concerned with human cognition, human decisions, and human behavior, it makes eminent sense to bring some balance in the strategy field by complementing the extant emphasis on the “objective” economics-based view with substantive attention to the “subjective” individual-oriented perspective. This calls for more focused inquiries into the role and nature of the individual strategy actors, and their cognitions and behaviors, in the strategy research enterprise. For the purposes of this book series, behavioral strategy would be broadly construed as covering all aspects of the role of the strategy maker in the entire strategy field. The scholarship relating to behavioral strategy is widely believed to be dispersed in diverse literatures. These existing contributions that relate to behavioral strategy within the overall field of strategy has been known and perhaps valued by most scholars all along, but were not adequately appreciated or brought together as a coherent sub-field or as a distinct perspective of strategy. This book series on Research in Behavioral Strategy will cover the essential progress made thus far in this admittedly fragmented literature and elaborate upon fruitful streams of scholarship. More importantly, the book series will focus on providing a robust and comprehensive forum for the growing scholarship in behavioral strategy. In particular, the volumes in the series will cover new views of interdisciplinary theoretical frameworks and models (dealing with all behavioral aspects), significant practical problems of strategy formulation, implementation, and evaluation, and emerging areas of inquiry. The series will also include comprehensive empirical studies of selected segments of business, economic, industrial, government, and non-profit activities with potential for wider application of behavioral strategy. Through the ongoing release of focused topical titles, this book series will seek to disseminate theoretical insights and practical management information that will enable interested professionals to gain a rigorous and comprehensive understanding of the subject of behavioral strategy. Entrepreneurship and Behavioral Strategy contains contributions by leading scholars in the field of entrepreneurship with an interest in researching behavioral perspectives. The 10 chapters in this volume deal with a number of significant issues relating broadly to the behavioral aspects of entrepreneurship, covering topics such as entrepreneurial process orientation, a machine learning approach to reviewing the intersection of the entrepreneurship and behavioral strategy literatures, the temporalities of entrepreneurial risk behavior, entrepreneurs under ambiguity, disruptive business model innovations, international attention, entrepreneurial team formation, building alliances in new and small ventures, the role of insight in entrepreneurial action, and the effects of foreign competition on entrepreneurship activities. The chapters include empirical as well as conceptual treatments of the selected topics, and collectively present a wide-ranging review of the noteworthy research perspectives on the confluence of entrepreneurship and behavioral strategy.

SAS Institute implements data mining in Enterprise Miner software, which will be used in this book focused segmentation tasks. SAS Institute defines the concept of Data Mining as the process of selecting (Selecting), explore (Exploring), modify (Modifying), modeling (Modeling) and rating (Assessment) large amounts of data with the aim of uncovering unknown patterns which can be used as a comparative advantage with respect to competitors. This process is summarized with the acronym SEMMA which are the initials of the 5 phases which comprise the process of Data Mining according to SAS Institute. The essential content of the book is as follows: SAS ENTERPRISE MINER WORKING ENVIRONMENTSEGMENTATION PREDICTIVE TECHNIQUES MODELING PREDICTIVE TECHNIQUES FOR SEGMENTATION REGRESSION NODE: MULTIPLE REGRESSION MODEL LOGISTIC REGRESSION DMINE REGRESSION NODE SEGMENTATION PREDICTIVE TECHNIQUES. DECISION TREES DECISION TREE NODE DECISION TREE INTERACTIVE TRAINING DECISION TREE NODE OUTPUT DATA SOURCES GRADIENT BOOSTING NODE SEGMENTATION PREDICITIVE MODELS WITH NEURAL NETWORKS NEURAL NETWORKS FOR SEGMENTATION OPTIMIZATION AND ADJUSTMENT OF SEGMENTATION MODELS WITH NETS: NEURAL NETWORK NODE SIMPLE NEURAL NETWORKS PERCEPTRONS HIDDEN LAYERS MULTILAYER PERCEPTRONS (MLPS) RADIAL BASIS FUNCTION (RBF) NETWORKS LOCAL PROCESSING NETWORKS SCORING NEURAL NETWORK NODE TRAIN PROPERTIES NEURAL NETWORK NODE RESULTS AUTONEURAL NODE NETWORK ARCHITECTURES DM NEURAL NODE ENSEMBLE NODE

SEGMENTATION DESCRIPTIVE TECHNIQUES. CLUSTER ANALYSIS CLUSTER ANALYSIS ON ENTERPRISE MINER CLUSTER NODE SOM/KOHONEN NODE VARIABLE CLUSTERING NODE PREDICTIVE MODELING WITH VARIABLE CLUSTERING EXAMPLE ASSESS PHASE IN SEGMENTATION PREDICTIVE MODELS CUTOFF NODE SCORE NODE SEGMENT PROFILE NODE

During the last two decades, computer and information technologies have forced great changes in the ways businesses manage operations in meeting the desired quality of products and services, customer demands, competition, and other challenges. The Handbook of Computational Intelligence in Manufacturing and Production Management focuses on new developments in computational intelligence in areas such as forecasting, scheduling, production planning, inventory control, and aggregate planning, among others. This comprehensive collection of research provides cutting-edge knowledge on information technology developments for both researchers and professionals in fields such as operations and production management, Web engineering, artificial intelligence, and information resources management.

Visit http://sas-book.com to download the data sets used in this workbook. This workbook is written for students in higher education. Instructors teaching predictive analytics courses can assign this workbook to their students to expose them to predictive analytics techniques using SAS Enterprise Miner. The workbook is developed using SAS Enterprise Miner 14.3, but it should apply to other versions with little to no changes. This workbook does not require students to have any previous knowledge of SAS Enterprise Miner. It walks students through the predictive analytics process using step-by-step by instructions. Even though the contents of this workbook can be completed by anyone who has access to SAS Enterprise Miner, knowledge of predictive analytics concepts is essential. Also, this workbook is not a substitute for any lecture or textbook. It is best if this workbook is used in parallel to lectures.

Handbook of Statistical Analysis and Data Mining Applications, Second Edition, is a comprehensive professional reference book that guides business analysts, scientists, engineers and researchers, both academic and industrial, through all stages of data analysis, model building and implementation. The handbook helps users discern technical and business problems, understand the strengths and weaknesses of modern data mining algorithms and employ the right statistical methods for practical application. This book is an ideal reference for users who want to address massive and complex datasets with novel statistical approaches and be able to objectively evaluate analyses and solutions. It has clear, intuitive explanations of the principles and tools for solving problems using modern analytic techniques and discusses their application to real problems in ways accessible and beneficial to practitioners across several areas—from science and engineering, to medicine, academia and commerce. Includes input by practitioners for practitioners Includes tutorials in numerous fields of study that provide step-by-step instruction on how to use supplied tools to build models Contains practical advice from successful real-world implementations Brings together, in a single resource, all the information a beginner needs to understand the tools and issues in data mining to build successful data mining solutions Features clear, intuitive explanations of novel analytical tools and techniques, and their practical applications

The fun and easy way to learn to use this leading business intelligence tool Written by an author team who is directly involved with SAS, this easy-to-follow guide is fully updated for the latest release of SAS and covers just what you need to put this popular software to work in your business. SAS allows any business or enterprise to improve data delivery, analysis, reporting, movement across a company, data mining, forecasting, statistical analysis, and more. SAS For Dummies, 2nd Edition gives you the necessary background on what SAS can do for you and explains how to use the Enterprise Guide. SAS provides statistical and data analysis tools to help you deal with all kinds of data: operational, financial, performance, and more Places special emphasis on Enterprise Guide and other analytical tools, covering all commonly used features Covers all commonly used features and shows you the practical applications you can put to work in your business Explores how to get various types of data into the software and how to work with databases Covers producing reports and Web reporting tools, analytics, macros, and working with your data In the easy-to-follow, no-nonsense For Dummies format, SAS For Dummies gives you the knowledge and the confidence to get SAS working for your organization. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

There are more than one billion documents on the Web, with the count continually rising at a pace of over one million new documents per day. As information increases, the motivation and interest in data warehousing and mining research and practice remains high in organizational interest. The Encyclopedia of Data Warehousing and Mining, Second Edition, offers thorough exposure to the issues of importance in the rapidly changing field of data warehousing and mining. This essential reference source informs decision makers, problem solvers, and data mining specialists in business, academia, government, and other settings with over 300 entries on theories, methodologies, functionalities, and applications.

This tutorial for data analysts new to SAS Enterprise Guide and SAS Enterprise Miner provides valuable experience using powerful statistical software to complete the kinds of business analytics common to most industries. This beginnner's guide with clear, illustrated, step-by-step instructions will lead you through examples based on business case studies. You will formulate the business objective, manage the data, and perform analyses that you can use to optimize marketing, risk, and customer relationship management, as well as business processes and human resources. Topics include descriptive analysis, predictive modeling and analytics, customer segmentation, market analysis, share-of-wallet analysis, penetration analysis, and business intelligence. --

Author cocitation analysis (ACA) is a subfield of informetrics, which is a broader term referring to the quantitative study of retrieval and processing bibliometric data collected from all types of communication media, including journals, books, and conference proceedings. While ACA is one of the few research methodologies that transcend the individual field of inquiry, and despite its usefulness and capabilities to reveal a larger vista hidden in bibliographic databases, it is not a particularly popular research tool in some academic disciplines. This book covers all essential ACA topics for graduate students and researchers who want to learn the basics and the research techniques to delineate the intellectual structure of various academic disciplines, compare cumulative research traditions, demonstrate theoretical differences between competing approaches, and to trace a paradigm shift in various academic disciplines over time.

Big data: It's unstructured, it's coming at you fast, and there's lots of it. In fact, the majority of big data is text-oriented, thanks to the proliferation of online sources such as blogs, emails, and social media. However, having big data means little if you can't leverage it with analytics. Now you can explore the large volumes of unstructured text data that your organization has collected with Text Mining and Analysis: Practical Methods, Examples, and Case Studies Using SAS. This hands-on guide to text analytics using SAS provides detailed, step-by-step instructions and explanations on how to mine your text data for valuable insight. Through its comprehensive approach, you'll learn not just how to analyze your data, but how to collect, cleanse, organize, categorize, explore, and interpret it as well. Text Mining and Analysis also features an extensive set of case studies, so you can see examples of how the applications work with real-world data from a variety of industries. Text analytics enables you to gain insights about your customers' behaviors and sentiments. Leverage your organization's text data, and use those insights for making better business decisions with Text Mining and Analysis. This book is part of the SAS Press program.

Better understand your customers using segmentation analytics in SAS Viya! Segmentation Analytics with SAS Viya: An Approach to Clustering and Visualization demonstrates the use of clustering and machine learning methods for the purpose of segmenting customer or client data into useful categories for marketing, market research, next best offers by segment, and more. This book highlights the latest and greatest methods available that show the power of SAS Viya while solving typical industry issues. Packed with real-world examples, this book provides readers with practical methods of using SAS Visual Data Mining and Machine

Learning (VDMML), SAS Model Studio, SAS Visual Statistics, SAS Visual Analytics, and coding in SAS Studio for segmentation model development and analysis. This book is designed for analysts, data miners, and data scientists who need to use the all in-memory platform of SAS Viya for the purposes of clustering and segmentation. Understanding how customers behave is a primary objective of most organizations, and segmentation is a key analytic method for achieving that objective.

Includes articles in topic areas such as autonomic computing, operating system architectures, and open source software technologies and applications.

"SAS Enterprise Miner is SAS's premier tool for data mining and predictive modeling. This course introduces Enterprise Miner while demonstrating two common applications: segmentation and predictive modeling. It starts with a brief overview of the software and then covers segmentation and predictive modeling using a case-study approach based on real-world data. Upon completing the course, learners will have a basic, working knowledge of how to use Enterprise Miner to perform data mining and machine learning tasks. Participants should have a quantitative background and (ideally) some basic understanding of predictive models, including regression."--Resource description page.

Decision Trees for Analytics Using SAS Enterprise Miner is the most comprehensive treatment of decision tree theory, use, and applications available in one easy-to-access place. This book illustrates the application and operation of decision trees in business intelligence, data mining, business analytics, prediction, and knowledge discovery. It explains in detail the use of decision trees as a data mining technique and how this technique complements and supplements data mining approaches such as regression, as well as other business intelligence applications that incorporate tabular reports, OLAP, or multidimensional cubes. An expanded and enhanced release of Decision Trees for Business Intelligence and Data Mining Using SAS Enterprise Miner, this book adds up-to-date treatments of boosting and high-performance forest approaches and rule induction. There is a dedicated section on the most recent findings related to bias reduction in variable selection. It provides an exhaustive treatment of the end-to-end process of decision tree construction and the respective considerations and algorithms, and it includes discussions of key issues in decision tree practice. Analysts who have an introductory understanding of data mining and who are looking for a more advanced, in-depth look at the theory and methods of a decision tree approach to business intelligence and data mining will benefit from this book.

Business Analytics Using SAS Enterprise Guide and SAS Enterprise MinerA Beginner's GuideSAS Institute

"This manual provides a general, practical introduction to data mining using SAS Enterprise Miner and SAS Text Miner software"--Pref.