Frontiers Of Statistical Decision Making And Bayesian Analysis In Honor Of James O Berger

New Frontiers in Engineering Geology and the EnvironmentJudgment and Decision Making Under Uncertainty: Descriptive, Normative, and Prescriptive PerspectivesFrontiers of CyberlearningFuzzy Statistical Decision-MakingFinancing Technology's FrontierProceedings of the First US/Japan Conference on the Frontiers of Statistical Modeling: An Informational ApproachDecision Making and Knowledge Decision Support SystemsFrontiers in Data ScienceDecision NeuroscienceStatisticsExploring Research Frontiers in Contemporary Statistics and EconometricsStatistical Modelling and Sports Business AnalyticsFoundations of Linear and Generalized Linear ModelsThe Frontiers of Statistical Scientific Theory & Industrial ApplicationsMathematical ReviewsFuzzy Theories on Decision MakingThe Frontiers of Modern Statistical Inference ProceduresFrontiers of EngineeringFrontiers in EducationFrontiers of Manufacturing Science and Measuring Technology IIProduction Risk and Decision Making: Testing Alternative Econometric Models with Evidence from Egyptian Cotton ProductionFrontiers in Statistical Quality ControlFrontiers of Engineering in Health CareFrontiers in Manufacturing TechnologyFrontiers in Robotics ResearchSocial Judgment and Decision MakingFrontiers of Statistical Decision Making and Bayesian AnalysisFrontiers in Manufacturing Technology: Computer technology for today's managerPrescriptive AnalyticsFrontiers of EconomicsBreakthroughs in StatisticsThe Frontiers of Statistical Computation, Simulation & ModelingNew Frontiers in Rice ResearchNew Frontiers in Healthcare ManagementManaging Service ProductivityNew Frontiers of Decision Making for the Information Technology EraFrontier Emerging Equity Markets Securities Price Behavior and ValuationThe Frontiers of Modern Statistical Inference Procedures, IIArtificial Intelligence Frontiers in StatisticsFrontiers of Manufacturing and Design Science

New Frontiers in Engineering Geology and the Environment

Judgment and Decision Making Under Uncertainty: Descriptive, Normative, and Prescriptive Perspectives

Further, this book develops the first comprehensive framework for valuing a frontier equity market. As the first research-level monograph exclusively dedicated to frontier emerging equity market analysis, it offers a unique dual perspective on how academic financial research finds its complementary and sometimes antagonistic counterpart in real-life investment decision-making.

Frontiers of Cyberlearning

Robotics began as a science fiction creation which has become quite real, first in assembly line operations such as automobile manufacturing, aeroplane construction etc. They have now reached such areas as the Internet, ever-multiplying-medical uses and sophisticated military applications. Control of today's robots is often remote which requires even more advanced computer vision capabilities as well as sensors and interface techniques. Learning has become crucial for modern robotic systems as well. This book brings together leading research in this exciting field.

Fuzzy Statistical Decision-Making

Like the first two volumes, published in 1981 and 1984 and met with a lively response, the present volume is collecting contributions stressed on methodology or successfull industrial applications. The papers are classified under two main headings; sampling inspection and process quality control. Among the papers dealing with sampling inspection, Liebesman analyzes the forthcoming ISO Standard for attribute skip-lot sampling, and v. Collani derives an alpha-optimal version of the Military Standard 105 D. Schneider and Wilrich have a strong case against cost optimal Bayesian sampling plans. Ohta and Furukawa deal with a new approach for calculating the operating characteristic of sequential sampling plans by attributes. Prematurely terminated sequential life tests for Military Standard 781 C are introduced by Derman, Lieberman and Schechner. Baillie extends the univariate methods for sampling inspection by variables to the multivariate case. A sampling inspection system for incoming batches based on relational databases is discussed by Lenz. The second group of papers deals with process quality control and continuous inspection. Ladany comes with a practical example of the engagement of a mini robot in process quality control . Shahani and Senna give some basic results for a two test scheme for the detection of failure of a production process, and Bergman suggests a control chart which is an improvement of an acceptance control chart. Montgomery, Gardiner and Pizzano discuss some practical aspects of the use of CUSUM charts and geometric moving average control charts, Wadsworth and Wasserman present a modified CUSUM procedure as a continuous sampling scheme, and Rendtel uses a generalized CUSUM-scheme to control the percent defective of a continuous production process. Heuristic economical designs for and R control charts are proposed by Saniga. Arnold designs and compares control charts based on the minimax principle. Woodall shows that the usually ignored statistical performance of economically optimal control charts can often be greatly improved. Murugesan and Hassan investigate the design of interrelated manufacturing and quality systems for multistage nonserial production.

Financing Technology's Frontier

A valuable overview of the most important ideas and results in statistical modeling Written by a highly-experienced author,

Foundations of Linear and Generalized Linear Models is a clear and comprehensive guide to the key concepts and results of linearstatistical models. The book presents a broad, in-depth overview of the most commonly usedstatistical models by discussing the theory underlying the models, R software applications,and examples with crafted models to elucidate key ideas and promote practical modelbuilding. The book begins by illustrating the fundamentals of linear models, such as how the model-fitting projects the data onto a model vector subspace and how orthogonal decompositions of the data yield information about the effects of explanatory variables. Subsequently, the book covers the most popular generalized linear models, which include binomial and multinomial logistic regression for categorical data, and Poisson and negative binomial loglinear models for count data. Focusing on the theoretical underpinnings of these models, Foundations ofLinear and Generalized Linear Models also features: An introduction to quasi-likelihood methods that require weaker distributional assumptions, such as generalized estimating equation methods An overview of linear mixed models and generalized linear mixed models with random effects for clustered correlated data, Bayesian modeling, and extensions to handle problematic cases such as high dimensional problems Numerous examples that use R software for all text data analyses More than 400 exercises for readers to practice and extend the theory, methods, and data analysis A supplementary website with datasets for the examples and exercises An invaluable textbook for upper-undergraduate and graduate-level students in statistics and biostatistics courses, Foundations of Linear and Generalized Linear Models is also an excellent reference for practicing statisticians and biostatisticians, as well as anyone who is interested in learning about the most important statistical models for analyzing data.

Proceedings of the First US/Japan Conference on the Frontiers of Statistical Modeling: An Informational Approach

Volume is indexed by Thomson Reuters CPCI-S (WoS). This collection brings together 820 peer-reviewed papers, on Manufacturing and Design Science, aimed at promoting the development of design and manufacturing science, strengthening international academic cooperation and communications, and exchanging research ideas. It is divided into: Chapter 1 Frontiers in Manufacturing Science, Chapter 2: Frontiers in Design Science, Chapter 3: Frontiers in Mechanics and Materials, Chapter 4: Frontiers in Automation and Information.

Decision Making and Knowledge Decision Support Systems

Frontiers in Data Science

This book introduces predictive analytics in sports and discusses the relationship between analytics and algorithms and

statistics. It defines sports data to be used and explains why the unique nature of sports would make analytics useful. The book also explains why the proper use of predictive analytics includes knowing what they are incapable of doing as well as the role of predictive analytics in the bigger picture of sports entrepreneurship, innovation, and technology. The book looks at the mathematical foundations that enhance technical knowledge of predictive models and illustrates through practical, insightful cases that will help to empower readers to build and deploy their own analytic methodologies. This book targets readers who already have working knowledge of location, dispersion, and distribution statistics, bivariate relationships (scatter plots and correlation coefficients), and statistical significance testing and is a reliable, well-rounded reference for furthering their knowledge of predictive analytics in sports.

Decision Neuroscience

The volume provides users and developers of the IT/S (information technology and systems) with information about the advances in decision making and decision-making support that empower and enable information technology in the direction of productivity and effectiveness of decision making in business. The chapters have been written by well-known international experts in decision making and they explore the frontiers of decision making in the era of IT/S. The book is intended to serve as a research source, scientific reference and business support source, as well as a book of student readings that will appeal to a larger international audience.

Statistics

Exploring Research Frontiers in Contemporary Statistics and Econometrics

Statistical Modelling and Sports Business Analytics

This book presents recent advancements of research, new methods and techniques, applications and projects in decision making and decision support systems. It explores expert systems and neural networks, knowledge engineering and management, fuzzy sets and systems and computational methods for optimization, data analysis and decision making. It presents applications in Economics, Finance, Management and Engineering. The book undertakes to stimulate scientific exchange, ideas and experiences in the field of decision making in Economy and Management. Researchers and practitioners alike will benefit from this book, when they are dealing with imprecision, vagueness and uncertainty in the context of decision making.

Foundations of Linear and Generalized Linear Models

This volume brings together classic key concepts and innovative theoretical ideas in the psychology of judgment and decision-making in social contexts. The chapters of the first section address the basic psychological processes underlying judgment and decision-making. The guiding question is "What information comes to mind and how is it transformed?" The second section poses the question of how social judgments and decisions are to be evaluated. The chapters in this section present new quantitative models that help separate various forms of accuracy and bias. The third section shows how judgments and decisions are shaped by ecological constraints. These chapters show how many seemingly complex configurations of social information are tractable by relatively simple statistical heuristics. The fourth section explores the relevance of research on judgment and decision making for specific tasks of personal or social relevance. These chapters explore how individuals can efficiently select mates, form and maintain friendship alliances, judiciously integrate their attitudes with those of a group, and help shape policies that are rational and morally sound. The book is intended as an essential resource for senior undergraduates, postgraduates, researchers, and practitioners.

The Frontiers of Statistical Scientific Theory & Industrial Applications

Research in Bayesian analysis and statistical decision theory is rapidly expanding and diversifying, making it increasingly more difficult for any single researcher to stay up to date on all current research frontiers. This book provides a review of current research challenges and opportunities. While the book can not exhaustively cover all current research areas, it does include some exemplary discussion of most research frontiers. Topics include objective Bayesian inference, shrinkage estimation and other decision based estimation, model selection and testing, nonparametric Bayes, the interface of Bayesian and frequentist inference, data mining and machine learning, methods for categorical and spatio-temporal data analysis and posterior simulation methods. Several major application areas are covered: computer models, Bayesian clinical trial design, epidemiology, phylogenetics, bioinformatics, climate modeling and applications in political science, finance and marketing. As a review of current research in Bayesian analysis the book presents a balance between theory and applications. The lack of a clear demarcation between theoretical and applied research is a reflection of the highly interdisciplinary and often applied nature of research in Bayesian statistics. The book is intended as an update for researchers in Bayesian statistics, including non-statisticians who make use of Bayesian inference to address substantive research questions in other fields. It would also be useful for graduate students and research scholars in statistics or biostatistics who wish to acquaint themselves with current research frontiers.

Mathematical Reviews

Fifteen healthcare managers share the secrets of their success and the various routes they have taken to get there. This is a mentoring guide for anyone interested in a healthcare management career.

Fuzzy Theories on Decision Making

Volume is indexed by Thomson Reuters CPCI-S (WoS). This book brings together 389 pieces of peer- This book brings together 389 peer-reviewed papers on Manufacturing Science and Measuring Technology. It provides the reader with a broad overview of the latest advances in the field of manufacturing science and measuring technology. It is divided into: Chapter 1: Manufacturing and Design Science; Chapter 2: Materials Science and Engineering; Chapter 3: Measuring Technology and Mechatronics.

The Frontiers of Modern Statistical Inference Procedures

This book demonstrates teachers' and learners' experiences with big data in education; education and cloud computing; and new technologies for teacher support. It also discusses the advantages of using these frontier technologies in teaching and learning and predicts the future challenges. As such, it enables readers to better understand how technologies can improve learning and teaching experiences. It is intended for graduates and scholars in educational technology disciplines and anyone interested in the applications of frontier technologies in education.

Frontiers of Engineering

Frontiers in Education

This book offers a comprehensive reference guide to fuzzy statistics and fuzzy decision-making techniques. It provides readers with all the necessary tools for making statistical inference in the case of incomplete information or insufficient data, where classical statistics cannot be applied. The respective chapters, written by prominent researchers, explain a wealth of both basic and advanced concepts including: fuzzy probability distributions, fuzzy frequency distributions, fuzzy Bayesian inference, fuzzy mean, mode and median, fuzzy dispersion, fuzzy p-value, and many others. To foster a better understanding, all the chapters include relevant numerical examples or case studies. Taken together, they form an excellent reference guide for researchers, lecturers and postgraduate students pursuing research on fuzzy statistics. Moreover, by extending all the main aspects of classical statistical decision-making to its fuzzy counterpart, the book presents a dynamic snapshot of the field that is expected to stimulate new directions, ideas and developments.

Frontiers of Manufacturing Science and Measuring Technology II

Production Risk and Decision Making: Testing Alternative Econometric Models with Evidence from Egyptian Cotton Production

This book presents a summary of recent work on the interface between artificial intelligence and statistics. It does this through a series of papers by different authors working in different areas of this interface. These papers are a selected and referenced subset of papers presented at the 3rd Interntional Workshop on Artificial Intelligence and Statistics, Florida, January 1991.

Frontiers in Statistical Quality Control

This volume describes how frontier efficiency methodologies such as Data Envelopment Analysis (DEA) and other techniques such as multi-criteria decision making can help service industries to improve their performance by providing a ranking of best-practice efficient service units and by identifying sources of inefficiency for each service unit. It explains how they can be used to determine potential improvement targets for each of the inefficient service units, to identify peers for each service organization and to provide a basis for continuous performance improvement. Presenting applications in a variety of industries, this book will be useful for the service management to improve service productivity, profitability, sustainability and quality and effectiveness of service deliveries. A free trial version of the World's leading Data Envelopment Analysis Software (PIM-DEA) is available for readers of this book.

Frontiers of Engineering in Health Care

Make Better Decisions, Leverage New Opportunities, and Automate Decisioning at Scale Prescriptive analytics is more directly linked to successful decision-making than any other form of business analytics. It can help you systematically sort through your choices to optimize decisions, respond to new opportunities and risks with precision, and continually reflect new information into your decisioning process. In Prescriptive Analytics, analytics expert Dr. Dursun Delen illuminates the field's state-of-the-art methods, offering holistic insight for both professionals and students. Delen's end-to-end, all-inclusive approach covers optimization, simulation, multi-criteria decision-making methods, inference- and heuristic-based decisioning, and more. Balancing theory and practice, he presents intuitive conceptual illustrations, realistic example problems, and real-world case studies–all designed to deliver knowledge you can use. Discover where prescriptive analytics fits and how it improves decision-making Identify optimal solutions for achieving an objective within real-world constraints

Analyze complex systems via Monte-Carlo, discrete, and continuous simulations Apply powerful multi-criteria decision-making and mature expert systems and case-based reasoning Preview emerging techniques based on deep learning and cognitive computing

Frontiers in Manufacturing Technology

Frontiers in Robotics Research

"New Frontiers in Engineering Geology and the Environment" collects selected papers presented at the International Symposium on Coastal Engineering Geology (ISCEG-Shanghai 2012). These papers involve many subjects – such as engineering geology, natural hazards, geoenvironment and geotechnical engineering – with a primary focus on geological engineering problems in coastal regions. The proceedings provide readers with the latest research results and engineering experiences from academic scientists, leading engineers and industry researchers who are interested in coastal engineering geology and the relevant fields. Yu Huang works at the Department of Geotechnical Engineering, Tongji University, China. Faquan Wu works at the Institute of Geology and Geophysics, Chinese Academy of Science, China and he is also the Secretary General of the International Association for Engineering Geology and the Environment. Zhenming Shi works at the Department of Geotechnical Engineering, Tongji University, China. Bin Ye works at the Department of Geotechnical Engineering, Tongji University, China.

Social Judgment and Decision Making

Frontiers of Statistical Decision Making and Bayesian Analysis

An excellent guide to the lives and works of the 44 Nobel laureates in Economics from the award's 1969 inception through 1999.

Frontiers in Manufacturing Technology: Computer technology for today's manager

An indispensable resource for anyone interested in the future of emerging technology industries Financing Technology's Frontier draws upon the experiences of today's most successful venture capitalists and entrepreneurs to provide investment professionals expert insight and powerful tools for identifying and capitalizing on the most promising high-tech

and biotech opportunities. It also includes proven business models and many fascinating and instructive case studies that help entrepreneurs, CEOs and CFOs learn from the successes and setbacks of other companies in their sectors. Richard Shanley (New York, NY) is a partner in the Health Services and New Media division at Deloitte Touche Tohmatsu.

Prescriptive Analytics

Often a statistical analysis involves use of a set of alternative models for the data. A "model-selection criterion" is a formula which provides a figure-of merit for the alternative models. Generally the alternative models will involve different numhers of parameters. Model-selection criteria take into account hoth the goodness-or-fit of a model and the numher of parameters used to achieve that fit. 1.1. SETS OF ALTERNATIVE MODELS Thus the focus in this paper is on data-analytic situations ill which there is consideration of a set of alternative models. Choice of a suhset of explanatory variahles in regression, the degree of a polynomial regression, the number of factors in factor analysis, or the numher of dusters in duster analysis are examples of such situations. 1.2. MODEL SELECTION VERSUS HYPOTHESIS TESTING In exploratory data analysis or in a preliminary phase of inference an approach hased on model-selection criteria can offer advantages over tests of hypotheses. The model-selection approach avoids the prohlem of specifying error rates for the tests. With model selection the focus can he on simultaneous competition between a hroad dass of competing models rather than on consideration of a sequence of simpler and simpler models.

Frontiers of Economics

Breakthroughs in Statistics

Frontiers in Data Science deals with philosophical and practical results in Data Science. A broad definition of Data Science describes the process of analyzing data to transform data into insights. This also involves asking philosophical, legal and social questions in the context of data generation and analysis. In fact, Big Data also belongs to this universe as it comprises data gathering, data fusion and analysis when it comes to manage big data sets. A major goal of this book is to understand data science as a new scientific discipline rather than the practical aspects of data analysis alone.

The Frontiers of Statistical Computation, Simulation & Modeling

New Frontiers in Rice Research

New Frontiers in Healthcare Management

The Library of Education is pleased to present this volume, which encompasses a number of seminal ideas which will come to fruition in the decades ahead. The book is psychological in orientation and its ideas range from the theoretical to the applied. Each chapter is an original paper by an outstanding educator. The papers are distinguished in that they report original research and its educational applications.

Managing Service Productivity

This book collects contributions written by well-known statisticians and econometricians to acknowledge Léopold Simar's far-reaching scientific impact on Statistics and Econometrics throughout his career. The papers contained herein were presented at a conference in Louvain-la-Neuve in May 2009 in honor of his retirement. The contributions cover a broad variety of issues surrounding frontier estimation, which Léopold Simar has contributed much to over the past two decades, as well as related issues such as semiparametric regression and models for censored data. This book collects contributions written by well-known statisticians and econometricians to acknowledge Léopold Simar's far-reaching scientific impact on Statistics and Econometrics throughout his career. The papers contained herein were presented at a conference in Louvain-la-Neuve in May 2009 in honor of his retirement. The contributions cover a broad variety of issues surrounding frontier estimation, which Léopold Simar has contributed much to over the past two decades, as well as related issues such as semiparametric regression and models for censored data.

New Frontiers of Decision Making for the Information Technology Era

Decision Neuroscience addresses fundamental questions about how the brain makes perceptual, value-based, and more complex decisions in non-social and social contexts. This book presents compelling neuroimaging, electrophysiological, lesional, and neurocomputational models in combination with hormonal and genetic approaches, which have led to a clearer understanding of the neural mechanisms behind how the brain makes decisions. The five parts of the book address distinct but inter-related topics and are designed to serve both as classroom introductions to major subareas in decision neuroscience and as advanced syntheses of all that has been accomplished in the last decade. Part I is devoted to anatomical, neurophysiological, pharmacological, and optogenetics animal studies on reinforcement-guided decision making, such as the representation of instructions, expectations, and outcomes; the updating of action values; and the evaluation process guiding choices between prospective rewards. Part II covers the topic of the neural representations of motivation, perceptual decision making, and value-based decision making in humans, combining neurcomputational models

and brain imaging studies. Part III focuses on the rapidly developing field of social decision neuroscience, integrating recent mechanistic understanding of social decisions in both non-human primates and humans. Part IV covers clinical aspects involving disorders of decision making that link together basic research areas including systems, cognitive, and clinical neuroscience; this part examines dysfunctions of decision making in neurological and psychiatric disorders, such as Parkinson's disease, schizophrenia, behavioral addictions, and focal brain lesions. Part V focuses on the roles of various hormones (cortisol, oxytocin, ghrelin/leptine) and genes that underlie inter-individual differences observed with stress, food choices, and social decision-making processes. The volume is essential reading for anyone interested in decision making neuroscience. With contributions that are forward-looking assessments of the current and future issues faced by researchers, Decision Neuroscience is essential reading for anyone interested in decision-making neuroscience. Provides comprehensive coverage of approaches to studying individual and social decision neuroscience, including primate neurophysiology, brain imaging in healthy humans and in various disorders, and genetic and hormonal influences on decision making Covers multiple levels of analysis, from molecular mechanisms to neural-systems dynamics and computational models of how we make choices Discusses clinical implications of process dysfunctions, including schizophrenia, Parkinson's disease, eating disorders, drug addiction, and pathological gambling Features chapters from top international researchers in the field and full-color presentation throughout with numerous illustrations to highlight key concepts

Frontier Emerging Equity Markets Securities Price Behavior and Valuation

This is a two volume collection of seminal papers in the statistical sciences written during the past 100 years. These papers have each had an outstanding influence on the development of statistical theory and practice over the last century. Each paper is preceded by an introduction written by an authority in the field providing background information and assessing its influence. Readers will enjoy a fresh outlook on now well-established features of statistical techniques and philosophy by becoming acquainted with the ways they have been developed. It is hoped that some readers will be stimulated to study some of the references provided in the Introductions (and also in the papers themselves) and so attain a deeper background knowledge of the basis of their work.

The Frontiers of Modern Statistical Inference Procedures, II

Artificial Intelligence Frontiers in Statistics

Frontiers of Manufacturing and Design Science

Space may have been called the final frontier, but there are new frontiers to discover every day, and engineers are the ones exploring them. Through groundbreaking research and new technologies, engineers are able to go beyond traditional boundaries to do things that would have been all but impossible just a few years ago. This book, the most recent in a series of publications, describes new and emerging technologies and explains how they were developed and the benefits they will bring. It also offers highlights of the pioneering research and technological work being done by some of the country's emerging leaders in engineering. Topics include biomechanics, sensors and control for manufacturing processes, safety and security issues, decisionmaking tools for design and manufacturing, and intelligent transportation systems.

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION