

1. Record Nr.	UNINA9910830487103321
Autore	Ghosh Malay
Titolo	Sequential estimation [[electronic resource] /] / Malay Ghosh, Nitis Mukhopadhyay, Pranab K. Sen
Pubbl/distr/stampa	New York, : Wiley, c1997
ISBN	1-283-27401-9 9786613274014 1-118-16592-6 1-118-16591-8
Descrizione fisica	1 online resource (504 p.)
Collana	Wiley series in probability and statistics. Probability and statistics
Altri autori (Persone)	MukhopadhyayNitis <1950-> SenPranab Kumar <1937->
Disciplina	519.54
Soggetti	Estimation theory Sequential analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Sequential Estimation; Contents; Preface; 1. Introduction and Coverage; 1.1 Introduction; 1.2 Some Sequential Sampling Schemes in Practice; 1.2.1 Binomial Waiting-Time Distribution; 1.2.2 Hypergeometric Waiting-Time Distribution; 1.2.3 Capture-Mark-Recapture Procedures; 1.2.4 Time-Sequential Models; 1.2.5 Sequential Models in Reliability Problems; 1.2.6 Recursive Estimation and Sequential Schemes; 1.3 Organization of This Book; 2. Probabilistic Results in Sequential Analysis; 2.1 Introduction; 2.2 Martingales; 2.3 Stopping Times; 2.4 Martingale Inequalities and Identities 2.5 Submartingale Convergence Theorems 2.6 Martingale Central Limit Theorems; 2.7 Random Central Limit Theorems and Berry-Esseen Bounds; 2.8 Renewal Theorem-First Passage and Residual Waiting Times; 2.9 Nonlinear Renewal Theory; 2.10 Exercises; 3. Some Basic Concepts for Fixed-Sample Estimation; 3.1 Introduction; 3.2 Decision-Theoretic Notions; 3.3 Bayesian Decision Rules; 3.4 Sufficiency and Efficiency; 3.5 Invariance and Transitivity; 3.6 Method of Maximum Likelihood; 3.7 Why Sequential?; 3.8 Exercises; 4. General Aspects of Sequential Estimation; 4.1 Introduction

4.2 Sufficiency, Rao-Blackwell Theorem, and Transitivity
 4.3 Cramer-Rao and Related Inequalities; 4.4 Sequential Binomial Sampling Plans;
 4.5 Exercises; 5. Sequential Bayesian Estimation; 5.1 Introduction; 5.2
 Bayesian Sequential Decision Rules; 5.3 Sequential Bayesian Estimation;
 5.4 Asymptotically Pointwise Optimal (APO) Stopping Rules; 5.5
 Hierarchical and Empirical Bayes Sequential Estimation; 5.6 Exercises;
 6. Multistage Estimation; 6.1 Introduction; 6.2 Fixed-Width Confidence
 Intervals and Two-Stage Procedures; 6.2.1 Stein's Two-Stage
 Procedure; 6.2.2 Modified Two-Stage Procedure
 6.2.3 Further Generalizations
 6.3 Fixed-Width Confidence Intervals and
 Three-Stage Procedures; 6.3.1 The Global Theory; 6.3.2 Applications of
 the Three-Stage Procedure; 6.4 Fixed-Width Confidence Intervals and
 Accelerated Sequential Procedures; 6.4.1 The Global Theory; 6.5 Point
 Estimation Problems; 6.5.1 Minimum Risk Normal Mean Problem; 6.5.2
 Two-Stage Procedure; 6.5.3 Modified Two-Stage Procedure; 6.5.4
 Three-Stage Procedure; 6.5.5 Accelerated Sequential Procedure; 6.6
 Other Related Estimation Problems; 6.6.1 Point Estimation in
 Exponential Populations; 6.6.2 Estimation of Normal Variance
 6.6.3 Binomial and Negative Binomial Problems
 6.7 Comparison of
 Populations; 6.7.1 Fixed-Width Confidence Intervals; 6.7.2 Point
 Estimation; 6.8 Estimation in Multivariate Normal and Linear Models;
 6.8.1 Estimation of Mean Vector When Σ Is Arbitrary; 6.8.2 Comparison
 of Populations; 6.8.3 Linear Regression Problems; 6.8.4 Shrinkage
 Estimators; 6.8.5 Estimation of Ordered Parameters; 6.9 Exercises; 7.
 Parametric Sequential Point Estimation; 7.1 Introduction; 7.2 Estimation
 of the Normal Mean; 7.3 Estimation of the Difference of Two Normal
 Means; 7.4 Point Estimation in Linear Models
 7.5 Estimation of the Multivariate Normal Mean

Sommario/riassunto

The only comprehensive guide to the theory and practice of one of today's most important probabilistic techniques
 The past 15 years have witnessed many significant advances in sequential estimation, especially in the areas of three-stage and nonparametric methodology. Yet, until now, there were no references devoted exclusively to this rapidly growing statistical field. Sequential Estimation is the first, single-source guide to the theory and practice of both classical and modern sequential estimation techniques--including parametric and nonparametric methods. Researchers in sequ