Record Nr.	UNINA9910139790503321
Autore	Zacks Shelemyahu <1932->
Titolo	Stage-wise adaptive designs [[electronic resource] /] / Shelemyahu Zacks
Pubbl/distr/stampa	Hoboken, NJ, : John Wiley & Sons, c2009
ISBN	1-282-13750-6 9786612137501 0-470-46695-2 0-470-46694-4
Descrizione fisica	1 online resource (411 p.)
Collana	Wiley series in probability and statistics
Disciplina Soggetti	610.72 Medicine - Research - Statistical methods Medical statistics Statistics Electronic books.
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	Stage-Wise Adaptive Designs; CONTENTS; Preface; 1 Synopsis; 1.1 Multistage and Sequential Estimation; 1.2 Adaptive Designs for Generalized Linear Models; 1.3 Adaptive Methods for Sampling from Finite Populations; 1.4 Adaptive Prediction and Forecasting in Time Series Analysis; 1.5 Adaptive Search of an MTD in Cancer Phase I Clinical Trials; 1.6 Adaptive and Sequential Procedures in Phase III Clinical Trials; 1.7 Sequential Allocation of Resources; 1.8 Sequential Detection of Change Points; 1.9 Sequential Methods in Industrial Testing, Reliability, and Design of Experiments 2 Multistage and Sequential Estimation2.1 Stein's Two-Stage Procedure; 2.2 Modifications to Attain Asymptotic Efficiency; 2.3 Two-Stage Sampling from Exponential Distributions; 2.3.1 Fixed-Width Confidence Interval for the Location Parameter of an Exponential Distribution; 2.3.2 Two-Stage Sampling for a Bounded Risk Point Estimation of the Exponential Parameter; 2.4 Sequential Fixed-Width Interval Estimation; 2.5 Distributions of Stopping Variables of Sequential Sampling; 2.5.1 General Theory; 2.5.2 Characteristics of Ray's Procedure; 2.5.3 Risk of

1.

	Some Sequential Point Estimators
	 2.6 Sequential Fixed-Width Intervals for the Log-Odds in Bernoulli Trials2.6.1 Problem; 2.6.2 Distribution of N(); 2.6.3 Functionals of Pn (); 2.7 Bayesian Sequential Estimation; 2.7.1 General Theory; 2.7.2 Estimating the Scale Parameter of the Exponential Distribution; 3 Adaptive Designs for Generalized Linear Models; 3.1 Exponential Example; 3.2 Adaptive Designs for the Fisher Information; 3.3 Adaptive Bayesian Designs; 3.4 Adaptive Designs for Inverse Regression; 3.4.1 Non-Bayesian Adaptive Designs; 3.4.2 Bayesian Adaptive Designs, Known; 3.5 Stochastic Approximation 4 Adaptive Methods for Sampling from Finite Populations4.1 Basic Theory; 4.1.1 Design Approach; 4.1.2 Modeling Approach; 4.2 Two- Stage and Sequential Estimation of the Population Mean; 4.2.1 Design Approach: SRSWR; 4.2.2 Design Approach: SRSWOR; 4.2.3 Modeling Approach: A.3 Adaptive Allocation of Stratified SRS; 4.3.1 Basic Theory; 4.3.2 Two-Stage Procedure for a Fixed-Width Interval Estimation of Yn Under Stratified Sampling; 4.4 Adaptive Search for Special Units; 4.5 Adaptive Estimation of the Size of a Finite Population; 4.6 Applications in Software Reliability 4.6.1 Sequential Stopping for Time Domain Models4.6.2 Sequential Stopping for Data Domain Models; 4.7 Sampling Inspection Schemes; 4.7.1 Two-Stage Sampling for Attributes; 4.7.2 Sequential Sampling for Attributes; 4.8 Dynamic Bayesian Prediction; 5 Adaptive Prediction and Forecasting in Time Series Analysis; 5.1 Basic Tools of Time Series Analysis; 5.2 Linear Predictors for Covariance Stationary T.S.; 5.2.1 Optimal Linear Predictors; 5.2.2 Minimal PMSE Predictors for AR(p) T.S.; 5.2.3 Prediction with Unknown Covariance Structure; 5.2.4 ARIMA Forecasting 5.3 Quadratic LSE Predictors for Nonstationary T.S.
Sommario/riassunto	An expert introduction to stage-wise adaptive designs in all areas of statistics Stage-Wise Adaptive Designs presents the theory and methodology of stage-wise adaptive design across various areas of study within the field of statistics, from sampling surveys and time series analysis to generalized linear models and decision theory. Providing the necessary background material along with illustrative S-PLUS functions, this book serves as a valuable introduction to the problems of adaptive designs. The author begins with a cohesive introduction to the subject and goes on to conc