Record Nr. Autore Titolo	UNINA9910139190603321 Box George E. P Bayesian inference in statistical analysis [[electronic resource] /] /
Pubbl/distr/stampa	George E.P. Box, George C. Tiao New York, : Wiley, 1992
ISBN	1-282-25164-3 9786613813909 1-118-03319-1 1-118-03144-X
Edizione Descrizione fisica	[Wiley classics library ed.] 1 online resource (610 p.)
Collana	Wiley Classics Library ; ; v.40
Altri autori (Persone) Disciplina	TiaoGeorge C. <1933-> 519.54 519.542
Soggetti	Mathematical statistics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Originally published: Reading, Mass. : Addison-Wesley Pub. Co., c1973. "A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references (p. 571-579) and indexes.
Nota di contenuto	BAYESIAN INFERENCE IN STATISTICAL ANALYSIS; CONTENTS; Chapter 1 Nature of Bayesian Inference; 1.1 Introduction and summary; 1.1.1 The role of statistical methods in scientific investigation; 1.1.2 Statistical inference as one part of statistical analysis; 1.1.3 The question of adequacy of assumptions; 1.1.4 An iterative process of model building in statistical analysis; 1.1.5 The role of Bayesian analysis; 1.2 Nature of Bayesian inference; 1.2.1 Bayes' theorem; 1.2.2 Application of Bayes' theorem with probability interpreted as frequencies 1.2.3 Application of Bayes' theorem with subjective probabilities1.2.4 Bayesian decision problems; 1.2.5 Application of Bayesian analysis to scientific inference; 1.3 Noninformative prior distributions; 1.3.1 The Normal mean (2 known); 1.3.2 The Normal standard deviation (known); 1.3.3 Exact data translated likelihoods and noninformative priors; 1.3.4 Approximate data translated likelihood; 1.3.5 Jeffreys' rule, information measure, and noninformative priors; 1.3.6 Noninformative priors for multiple parameters; 1.3.7 Noninformative prior distributions: A summary

1.

	1.4 Sufficient statistics1.4.1 Relevance of sufficient statistics in Bayesian inference; 1.4.2 An example using the Cauchy distribution; 1.5 Constraints on parameters; 1.6 Nuisance parameters; 1.6.1 Application to robustness studies; 1.6.2 Caution in integrating out nuisance parameters; 1.7 Systems of inference; 1.7.1 Fiducial inference and likelihood inference; Appendix A1.1 Combination of a Normal prior and a Normal likelihood; Chapter 2 Standard Normal Theory Inference Problems; 2.1 Introduction; 2.1.1 The Normal distribution; 2.1.2 Common Normal-theory problems 2.1.3 Distributional assumptions2.2 Inferences concerning a single mean from observations assuming common known variance; 2.2.1 An example; 2.2.2 Bayesian intervals; 2.2.3 Parallel results from sampling theory; 2.3 Inferences concerning the spread of a Normal distribution from observations having common known mean; 2.3.1 The inverted 2, inverted , and the log distributions; 2.3.2 Inferences about the spread of a Normal distribution; 2.3.3 An example; 2.3.4 Relationship to sampling theory results; 2.4 Inferences when both mean and standard deviation are unknown; 2.4.1 An example 2.4.2 Component distributions of $p(, y)$ 2.4.3 Posterior intervals for ; 2.4.4 Geometric interpretation of the derivation of $p(y)$; 2.4.5 Informative prior distribution of ; 2.4.6 Effect of changing the metric of for locally uniform prior; 2.4.7 Elimination of the nuisance parameter in Bayesian and sampling theories; 2.5 Inferences concerning the difference between two means; 2.5.1 Distribution oft 2 - 1 when 21 = 22; 2.5.2 Distribution of 2 - 1 when 21 and 22 are not assumed equal; 2.5.3 Approximations to the Behrens-Fisher distribution; 2.5.4 An example 2.6 Inferences concerning a variance ratio
Sommario/riassunto	The Wiley Classics Library consists of selected books that have become recognized classics in their respective fields. With these new unabridged and inexpensive editions, Wiley hopes to extend the life of these important works by making them available to future generations of mathematicians and scientists. Currently available in the Series: T. W. Anderson The Statistical Analysis of Time Series T. S. Arthanari & Yadolah Dodge Mathematical Programming in Statistics Emil Artin Geometric Algebra Norman T. J. Bailey The Elements of Stochastic Processes with Applications to the Natural Sciences Rob