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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 1.4 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 assumptions
 2.2 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 χ^2 , inverted F , and the log χ^2 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 $p(\mu, \sigma^2 | y)$
 2.4.3 Posterior intervals for μ ; 2.4.4 Geometric interpretation of the derivation of $p(\mu | y)$; 2.4.5 Informative prior distribution of μ ; 2.4.6 Effect of changing the metric of μ for locally uniform prior; 2.4.7 Elimination of the nuisance parameter σ^2 in Bayesian and sampling theories; 2.5 Inferences concerning the difference between two means; 2.5.1 Distribution of $\bar{y}_1 - \bar{y}_2$ when $\sigma_1^2 = \sigma_2^2$; 2.5.2 Distribution of $\bar{y}_1 - \bar{y}_2$ when σ_1^2 and σ_2^2 are not assumed equal; 2.5.3 Approximations to the Behrens-Fisher distribution; 2.5.4 An example
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Sommario/riassunto

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