Record Nr.	UNINA9910462657803321
Autore	Lee Peter M
Titolo	Bayesian statistics [[electronic resource]] : an introduction / / Peter M. Lee
Pubbl/distr/stampa	Chichester, West Sussex ; ; Hoboken, N.J., 2012
ISBN	1-280-77576-9 9786613686152 1-118-35975-5
Edizione	[4th ed.]
Descrizione fisica	1 online resource (488 p.)
Disciplina	519.5/42
Soggetti	Bayesian statistical decision theory
	Mathematical statistics
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 index.
Nota di contenuto	 Bayesian Statistics; Contents; Preface; Preface to the First Edition; 1 Preliminaries; 1.1 Probability and Bayes' Theorem; 1.1.1 Notation; 1.1.2 Axioms for probability; 1.1.3 'Unconditional' probability; 1.1.4 Odds; 1.1.5 Independence; 1.1.6 Some simple consequences of the axioms; Bayes' Theorem; 1.2 Examples on Bayes' Theorem; 1.2.1 The Biology of Twins; 1.2.2 A political example; 1.2.3 A warning; 1.3 Random variables; 1.3.1 Discrete random variables; 1.3.2 The binomial distribution; 1.3.3 Continuous random variables; 1.3.4 The normal distribution; 1.3.5 Mixed random variables 1.4 Several random variables 1.4.1 Two discrete random variables; 1.4.2 Two continuous random variables; 1.4.3 Bayes' Theorem for random variables; 1.4.4 Example; 1.4.5 One discrete variable and one continuous variable; 1.4.6 Independent random variables; 1.5 Means and variances; 1.5.1 Expectations; 1.5.2 The expectation of a sum and of a product; 1.5.3 Variance, precision and standard deviation; 1.5.4 Examples; 1.5.5 Variance of a sum; covariance and correlation; 1.5.6 Approximations to the mean and variance of a function of a random variable; 1.5.7 Conditional expectations and variances 1.5.8 Medians and modes1.6 Exercises on Chapter 1; 2 Bayesian

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Sommario/riassunto	Bayesian Statistics is the school of thought that combines prior beliefs with the likelihood of a hypothesis to arrive at posterior beliefs. The first edition of Peter Lee's book appeared in 1989, but the subject has moved ever onwards, with increasing emphasis on Monte Carlo based techniques. This new fourth edition looks at recent techniques such as variational methods, Bayesian importance sampling, approximate Bayesian computation and Reversible Jump Markov Chain Monte Carlo (RJMCMC), providing a concise account of the way in which the Bayesian approach to statistics develo