1. Record Nr. UNINA9910254074603321

Autore	Dixit Ulhas Jayram
Titolo	Examples in Parametric Inference with R / / by Ulhas Jayram Dixit
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2016
ISBN	981-10-0889-2
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (LVIII, 423 p. 26 illus.)
Disciplina	519.5
Soggetti	Statistics Mathematical statistics - Data processing Computer science - Mathematics Mathematical statistics Statistical Theory and Methods Statistics and Computing Probability and Statistics in Computer Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Prerequisite -- Chapter 1. Sufficiency and Completeness -- Chapter 2. Unbiased Estimation -- Chapter 3. Moment and Maximum Likelihood Estimators -- Chapter 4. Bound for the Variance -- Chapter 5. Consistent Estimator -- Chapter 6. Bayes Estimator -- Chapter 7. Most Powerful Test -- Chapter 8. Unbiased and Other Tests -- Bibliography.
Sommario/riassunto	This book discusses examples in parametric inference with R. Combining basic theory with modern approaches, it presents the latest developments and trends in statistical inference for students who do not have an advanced mathematical and statistical background. The topics discussed in the book are fundamental and common to many fields of statistical inference and thus serve as a point of departure for in-depth study. The book is divided into eight chapters: Chapter 1 provides an overview of topics on sufficiency and completeness, while Chapter 2 briefly discusses unbiased estimation. Chapter 3 focuses on the study of moments and maximum likelihood estimators, and Chapter 4 presents bounds for the variance. In Chapter 5, topics on consistent estimator are discussed. Chapter 6 discusses Bayes, while Chapter 7 studies some more powerful tests. Lastly, Chapter 8

examines unbiased and other tests. Senior undergraduate and graduate students in statistics and mathematics, and those who have taken an introductory course in probability, will greatly benefit from this book. Students are expected to know matrix algebra, calculus, probability and distribution theory before beginning this course. Presenting a wealth of relevant solved and unsolved problems, the book offers an excellent tool for teachers and instructors who can assign homework problems from the exercises, and students will find the solved examples hugely beneficial in solving the exercise problems.