

1. Record Nr.	UNINA9910824967203321
Autore	Roff Derek A. <1949->
Titolo	Introduction to computer-intensive methods of data analysis in biology // Derek A. Roff
Pubbl/distr/stampa	Cambridge, UK ; ; New York, : Cambridge University Press, 2006
ISBN	1-107-15228-3 1-280-95612-7 9786610956128 0-511-35163-1 0-511-64826-X 0-511-21912-1 0-511-56773-1 0-511-61678-3 0-511-21980-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (vii, 368 pages) : digital, PDF file(s)
Disciplina	570.285
Soggetti	Biology - Data processing Bioinformatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references (p. 233-241) and index.
Nota di contenuto	1. An introduction to computer intensive methods; 2. Maximum likelihood; 3. The Jack-knife; 4. The Bootstrap; 5. Randomisation; 6. Regression methods; 7. Bayesian methods; References; Exercises; Appendix A: an overview of S-Plus methods used in this book; Appendix B: brief description of S-Plus subroutines used in this book; Appendix C: S-Plus codes cited in text.
Sommario/riassunto	This 2006 guide to the contemporary toolbox of methods for data analysis will serve graduate students and researchers across the biological sciences. Modern computational tools, such as Maximum Likelihood, Monte Carlo and Bayesian methods, mean that data analysis no longer depends on elaborate assumptions designed to make analytical approaches tractable. These new 'computer-intensive' methods are currently not consistently available in statistical software

packages and often require more detailed instructions. The purpose of this book therefore is to introduce some of the most common of these methods by providing a relatively simple description of the techniques. Examples of their application are provided throughout, using real data taken from a wide range of biological research. A series of software instructions for the statistical software package S-PLUS are provided along with problems and solutions for each chapter.
