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Autore	Kass Robert E.
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Introduction -- Exploring Data -- Probability and Random Variables -- Random Vectors -- Important Probability Distributions -- Sequences of Random Variables -- Estimation and Uncertainty -- Estimation in Theory and Practice -- Uncertainty and the Bootstrap -- Statistical Significance -- General Methods for Testing Hypotheses -- Linear Regression -- Analysis of Variance -- Generalized Regression -- Nonparametric Regression -- Bayesian Methods -- Multivariate Analysis -- Time Series -- Point Processes -- Appendix: Mathematical Background -- Example Index -- Index -- Bibliography.
Sommario/riassunto	Continual improvements in data collection and processing have had a huge impact on brain research, producing data sets that are often large and complicated. By emphasizing a few fundamental principles, and a handful of ubiquitous techniques, Analysis of Neural Data provides a unified treatment of analytical methods that have become essential for contemporary researchers. Throughout the book ideas are illustrated with more than 100 examples drawn from the literature, ranging from

electrophysiology, to neuroimaging, to behavior. By demonstrating the commonality among various statistical approaches the authors provide the crucial tools for gaining knowledge from diverse types of data. Aimed at experimentalists with only high-school level mathematics, as well as computationally-oriented neuroscientists who have limited familiarity with statistics, Analysis of Neural Data serves as both a self-contained introduction and a reference work.