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Titolo	Bootstrap methods : with applications in R / / Gerhard Dikta, Marsel Scheer
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2021] ©2021
ISBN	3-030-73480-3
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XVI, 256 p. 36 illus., 29 illus. in color.)
Disciplina	519.502855133
Soggetti	Bootstrap (Estadística) Processament de dades R (Llenguatge de programació) R (Computer program language) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Generating random numbers -- The classical bootstrap -- Bootstrap based tests -- Regression analysis -- Goodness of fit test for generalized linear models -- boot package -- s i mTool package -- boot GOF package -- Session Info -- Notation and References -- Index.
Sommario/riassunto	This book provides a compact introduction to the bootstrap method. In addition to classical results on point estimation and test theory, multivariate linear regression models and generalized linear models are covered in detail. Special attention is given to the use of bootstrap procedures to perform goodness-of-fit tests to validate model or distributional assumptions. In some cases, new methods are presented here for the first time. The text is motivated by practical examples and the implementations of the corresponding algorithms are always given directly in R in a comprehensible form. Overall, R is given great importance throughout. Each chapter includes a section of exercises and, for the more mathematically inclined readers, concludes with rigorous proofs. The intended audience is graduate students who already have a prior knowledge of probability theory and mathematical

statistics.
