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Titolo	An Introduction to Statistical Learning : with Applications in Python // by Gareth James, Daniela Witten, Trevor Hastie, Robert Tibshirani, Jonathan Taylor
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Descrizione fisica	1 online resource (617 pages)
Collana	Springer Texts in Statistics, , 2197-4136
Disciplina	511.8
Soggetti	Statistics Mathematical statistics - Data processing Statistical Theory and Methods Statistics and Computing Applied Statistics Estadística matemàtica Models matemàtics Python (Llenguatge de programació) Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- Statistical Learning -- Linear Regression -- Classification -- Resampling Methods -- Linear Model Selection and Regularization -- Moving Beyond Linearity -- Tree-Based Methods -- Support Vector Machines -- Deep Learning -- Survival Analysis and Censored data -- Unsupervised Learning -- Multiple Testing -- Index.
Sommario/riassunto	An Introduction to Statistical Learning provides an accessible overview of the field of statistical learning, an essential toolset for making sense of the vast and complex data sets that have emerged in fields ranging from biology to finance, marketing, and astrophysics in the past twenty years. This book presents some of the most important modeling and prediction techniques, along with relevant applications. Topics include linear regression, classification, resampling methods, shrinkage

approaches, tree-based methods, support vector machines, clustering, deep learning, survival analysis, multiple testing, and more. Color graphics and real-world examples are used to illustrate the methods presented. This book is targeted at statisticians and non-statisticians alike, who wish to use cutting-edge statistical learning techniques to analyze their data. Four of the authors co-wrote *An Introduction to Statistical Learning, With Applications in R (ISLR)*, which has become a mainstay of undergraduate and graduate classrooms worldwide, as well as an important reference book for data scientists. One of the keys to its success was that each chapter contains a tutorial on implementing the analyses and methods presented in the R scientific computing environment. However, in recent years Python has become a popular language for data science, and there has been increasing demand for a Python-based alternative to ISLR. Hence, this book (ISLP) covers the same materials as ISLR but with labs implemented in Python. These labs will be useful both for Python novices, as well as experienced users.

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