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Titolo	The Data Science Design Manual // by Steven S. Skiena
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ISBN	3-319-55444-1
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVII, 445 p. 180 illus., 137 illus. in color.)
Collana	Texts in Computer Science, , 1868-095X
Disciplina	519.50285
Soggetti	Data mining Pattern recognition systems Quantitative research Information visualization Mathematical statistics - Data processing Data Mining and Knowledge Discovery Automated Pattern Recognition Data Analysis and Big Data Data and Information Visualization Statistics and Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	What is Data Science? -- Mathematical Preliminaries -- Data Munging -- Scores and Rankings -- Statistical Analysis -- Visualizing Data -- Mathematical Models -- Linear Algebra -- Linear and Logistic Regression -- Distance and Network Methods -- Machine Learning -- Big Data: Achieving Scale.
Sommario/riassunto	This engaging and clearly written textbook/reference provides a must-have introduction to the rapidly emerging interdisciplinary field of data science. It focuses on the principles fundamental to becoming a good data scientist and the key skills needed to build systems for collecting, analyzing, and interpreting data. The Data Science Design Manual is a source of practical insights that highlights what really matters in analyzing data, and provides an intuitive understanding of how these core concepts can be used. The book does not emphasize any

particular programming language or suite of data-analysis tools, focusing instead on high-level discussion of important design principles. This easy-to-read text ideally serves the needs of undergraduate and early graduate students embarking on an “Introduction to Data Science” course. It reveals how this discipline sits at the intersection of statistics, computer science, and machine learning, with a distinct heft and character of its own. Practitioners in these and related fields will find this book perfect for self-study as well. Additional learning tools: Contains “War Stories,” offering perspectives on how data science applies in the real world Includes “Homework Problems,” providing a wide range of exercises and projects for self-study Provides a complete set of lecture slides and online video lectures at www.data-manual.com Provides “Take-Home Lessons,” emphasizing the big-picture concepts to learn from each chapter Recommends exciting “Kaggle Challenges” from the online platform Kaggle Highlights “False Starts,” revealing the subtle reasons why certain approaches fail Offers examples taken from the data science television show “The Quant Shop” (www.quant-shop.com).
