1. Record Nr. UNINA9910254840103321 Autore Igual Laura Titolo Introduction to Data Science: A Python Approach to Concepts, Techniques and Applications / / by Laura Igual, Santi Seguí Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-50017-1 Edizione [1st ed. 2017.] Descrizione fisica 1 online resource (XIV, 218 p. 73 illus., 67 illus. in color.) Collana Undergraduate Topics in Computer Science, , 2197-1781 Disciplina 001.42 Soggetti Data mining Computer science - Mathematics Mathematical statistics Artificial intelligence Pattern recognition systems Mathematical statistics - Data processing Data Mining and Knowledge Discovery Probability and Statistics in Computer Science Artificial Intelligence **Automated Pattern Recognition** Statistics and Computing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction to Data Science -- Toolboxes for Data Scientists --Nota di contenuto Descriptive statistics -- Statistical Inference -- Supervised Learning --Regression Analysis -- Unsupervised Learning -- Network Analysis --Recommender Systems -- Statistical Natural Language Processing for Sentiment Analysis -- Parallel Computing. Sommario/riassunto This accessible and classroom-tested textbook/reference presents an introduction to the fundamentals of the emerging and interdisciplinary field of data science. The coverage spans key concepts adopted from statistics and machine learning, useful techniques for graph analysis and parallel programming, and the practical application of data science for such tasks as building recommender systems or performing

sentiment analysis. Topics and features: Provides numerous practical case studies using real-world data throughout the book Supports understanding through hands-on experience of solving data science problems using Python Describes techniques and tools for statistical analysis, machine learning, graph analysis, and parallel programming Reviews a range of applications of data science, including recommender systems and sentiment analysis of text data Provides supplementary code resources and data at an associated website This practically-focused textbook provides an ideal introduction to the field for upper-tier undergraduate and beginning graduate students from computer science, mathematics, statistics, and other technical disciplines. The work is also eminently suitable for professionals on continuous education short courses, and to researchers following selfstudy courses. Dr. Laura Igual is an Associate Professor at the Departament de Matemàtiques i Informàtica, Universitat de Barcelona, Spain. Dr. Santi Seguí is an Assistant Professor at the same institution.