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Nota di contenuto	Part I: Overview of Data Science and Data Science Education -- Chapter 1. Introduction -- Chapter 2. What is data science -- Chapter 3. Introduction to data science education -- Chapter 4. Data science thinking -- Part II: Challenges of Data Science Education -- Chapter 5. The pedagogical challenge of data science education -- Chapter 6. Data science education and the variety of learners -- Chapter 7. The interdisciplinarity challenge -- Chapter 8. Data science skills -- Part III: Data science Teaching frameworks -- Chapter 9. Teacher Preparation - the Method for Teaching Data Science course -- Chapter 10. Data Science for Social Science -- Chapter 11. Conclusion.
Sommario/riassunto	Data science is a new field that touches on almost every domain of our lives, and thus it is taught in a variety of environments. Accordingly, the book is suitable for teachers and lecturers in all educational frameworks: K-12, academia and industry. This book aims at closing a significant gap in the literature on the pedagogy of data science. While there are many articles and white papers dealing with the curriculum of data science (i.e., what to teach?), the pedagogical aspect of the field (i. e., how to teach?) is almost neglected. At the same time, the

importance of the pedagogical aspects of data science increases as more and more programs are currently open to a variety of people. This book provides a variety of pedagogical discussions and specific teaching methods and frameworks, as well as includes exercises, and guidelines related to many data science concepts (e.g., data thinking and the data science workflow), main machine learning algorithms and concepts (e.g., KNN, SVM, Neural Networks, performance metrics, confusion matrix, and biases) and data science professional topics (e. g., ethics, skills and research approach). Professor Orit Hazzan is a faculty member at the Technion’s Department of Education in Science and Technology since October 2000. Her research focuses on computer science, software engineering and data science education. Within this framework, she studies the cognitive and social processes on the individual, the team and the organization levels, in all kinds of organizations. Dr. Koby Mike is a Ph.D. graduate from the Technion's Department of Education in Science and Technology under the supervision of Professor Orit Hazzan. He continued his post-doc research on data science education at the Bar-Ilan University, and obtained a B.Sc. and an M.Sc. in Electrical Engineering from Tel Aviv University.