Record Nr. UNINA9910427686703321 Autore Kordon Arthur K. Titolo Applying data science: how to create value with artificial intelligence / / Arthur K. Kordon Cham, Switzerland: ,: Springer, , [2020] Pubbl/distr/stampa ©2020 **ISBN** 3-030-36375-9 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (XXXII, 494 p. 262 illus., 195 illus. in color.) 658.0563 Disciplina Soggetti Artificial intelligence Business - Data processing Big data Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I, From Business Problems to Data Science -- Data Science Based on Artificial Intelligence -- Business Problems Dependent on Data --Artificial Intelligence-Based Data Science Solutions -- Integrate and Conquer -- The Lost-in-Translation Trap -- Part II, The AI-Based Data Science Toolbox -- The Al-Based Data Science Workflow -- Problem Knowledge Acquisition -- Data Preparation -- Data Analysis -- Model Development -- The Model Deployment Life Cycle -- Part III, Al-Based Data Science in Action -- Infrastructure -- People -- Applications of Al-Based Data Science in Manufacturing -- Applications of Al-Based Data Science in Business -- How to Operate Al-Based Data Science in a Business -- How to Become an Effective Data Scientist -- Glossary. Sommario/riassunto This book offers practical guidelines on creating value from the application of data science based on selected artificial intelligence methods. In Part I, the author introduces a problem-driven approach to implementing Al-based data science and offers practical explanations of key technologies: machine learning, deep learning, decision trees and random forests, evolutionary computation, swarm intelligence, and intelligent agents. In Part II, he describes the main steps in creating Al-

based data science solutions for business problems, including problem

knowledge acquisition, data preparation, data analysis, model

development, and model deployment lifecycle. Finally, in Part III the author illustrates the power of AI-based data science with successful applications in manufacturing and business. He also shows how to introduce this technology in a business setting and guides the reader on how to build the appropriate infrastructure and develop the required skillsets. The book is ideal for data scientists who will implement the proposed methodology and techniques in their projects. It is also intended to help business leaders and entrepreneurs who want to create competitive advantage by using AI-based data science, as well as academics and students looking for an industrial view of this discipline.