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	Titolo	Data Science for Healthcare : Methodologies and Applications / / edited by Sergio Consoli, Diego Reforgiato Recupero, Milan Petkovi
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	ISBN	3-030-05249-4
	Edizione	[1st ed. 2019.]
	Descrizione fisica	1 online resource (367 pages)
	Disciplina	610.285
	Soggetti	Data mining
		Artificial intelligence
		Medical informatics
		Information storage and retrieval
		Application software
		Data Mining and Knowledge Discovery
		Artificial Intelligence
		Health Informatics
		Information Storage and Retrieval
		Information Systems Applications (incl. Internet)
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Nota di contenuto	Part I: Challenges and Basic Technologies -- Data Science in healthcare: benefits, challenges and opportunities -- Introduction to Classification Algorithms and their Performance Analysis using Medical Examples -- The role of deep learning in improving healthcare -- Part II: Specific Technologies and Applications -- Making effective use of healthcare data using data-to-text technology -- Clinical Natural Language Processing with Deep Learning -- Ontology-based Knowledge Management for Comprehensive Geriatric Assessment and Reminiscence Therapy on Social Robots -- Assistive Robots for the elderly: innovative tools to gather health relevant data -- Overview of data linkage methods for integrating separate health data sources -- A Flexible Knowledge-based Architecture For Supporting The Adoption of Healthy Lifestyles with Persuasive Dialogs -- Visual Analytics for

Classifier Construction and Evaluation for Medical Data -- Data Visualization in Clinical Practice -- Using process analytics to improve healthcare processes -- A Multi-Scale Computational Approach to Understanding Cancer Metabolism -- Leveraging healthcare financial analytics for improving the health of entire populations.

Sommario/riassunto	This book seeks to promote the exploitation of data science in healthcare systems. The focus is on advancing the automated analytical methods used to extract new knowledge from data for healthcare applications. To do so, the book draws on several interrelated disciplines, including machine learning, big data analytics, statistics, pattern recognition, computer vision, and Semantic Web technologies, and focuses on their direct application to healthcare. Building on three tutorial-like chapters on data science in healthcare, the following eleven chapters highlight success stories on the application of data science in healthcare, where data science and artificial intelligence technologies have proven to be very promising. This book is primarily intended for data scientists involved in the healthcare or medical sector. By reading this book, they will gain essential insights into the modern data science technologies needed to advance innovation for both healthcare businesses and patients. A basic grasp of data science is recommended in order to fully benefit from this book.