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Titolo	AI and Big Data in Cardiology : A Practical Guide / / edited by Nicolas Duchateau and Andrew P. King
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Soggetti	Artificial intelligence - Medical applications Big data
Lingua di pubblicazione	Inglese
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Nota di contenuto	Introduction -- AI and Machine Learning: the Basics -- From Machine Learning to Deep Learning -- Measurement and Quantification -- Diagnosis -- Outcome Prediction -- Quality Control -- AI and Decision Support -- AI in the Real World -- Analysis of Non-imaging Data -- Conclusions.
Sommario/riassunto	This book provides a detailed technical overview of the use and applications of artificial intelligence (AI), machine learning and big data in cardiology. Recent technological advancements in these fields mean that there is significant gain to be had in applying these methodologies into day-to-day clinical practice. Chapters feature detailed technical reviews and highlight key current challenges and limitations, along with the available techniques to address them for each topic covered. Sample data sets are also included to provide hands-on tutorials for readers using Python-based Jupyter notebooks, and are based upon real-world examples to ensure the reader can develop their confidence in applying these techniques to solve everyday clinical problems. Artificial Intelligence and Big Data in Cardiology systematically describes and technically reviews the latest applications of AI and big data within cardiology. It is ideal for use by the trainee and practicing cardiologist and informatician seeking an up-to-date resource on the topic with which to aid them in developing a thorough understanding of both basic concepts and recent advances in the field.