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Nota di contenuto	Chapter 1-Artificial Intelligence in Medical Imaging: A Brief Glance -- Chapter 2-AI Fundamentals -- Chapter 3-Principles of Machine Learning -- Chapter 4-Principles of Deep Learning -- Chapter 5-Image Processing and Analysis -- Chapter 6-AI in CT Image Reconstruction -- Chapter 7-AI Applications in Medical Imaging -- Chapter 8-Ethical and Regulatory Considerations -- Chapter 9-Future Trends and Challenges.
Sommario/riassunto	This book covers the principles, concepts, and applications of artificial intelligence in medical imaging technologies, specifically in the context of diagnostic imaging, such as radiography and radiological technology. First, artificial intelligence and its subsets machine learning and deep learning are described followed by a discussion of applications of these AI principles in medical imaging technologies. Finally, ethical questions, regulatory aspects, and future trends and challenges are also reviewed in this textbook. This book is intended for both students and practitioners in radiological technology, radiography, radiation therapy, nuclear medicine technology, diagnostic medical sonography, and biomedical engineering technology. Furthermore, residents in radiology, and medical physics students and related healthcare personnel (administrators and managers for example) may

find this book useful. .

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