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Nota di contenuto	1. AI deep learning generative models for drug discovery -- 2. Generative AI in Medical Image Analysis -- 3. Transformer GAN for Fast MRI -- 4. Synthetic Data as a Tool to Combat Racial Bias in Medical AI: Utilizing Zero- Shot Text-to-Image Generative Models for Optimizing Skin Cancer Classifier Performance -- 5. Generative AI in Medical Imaging and its application in Low dose CT Image Denoising -- 6. Generative AI and drug discovery -- 7. Generative Adversarial Networks for medical imaging applications -- 8. Demoing laparoscopy surgery images using an GANs -- 9. Use of Generative Adversarial Network in Radiology -- 10. Generative Style Transfer in Histopathology -- 11. Generative adversarial networks s for Image Rendering -- 12. The ArtBench Dataset: Benchmarking Generative Models with Artworks -- 13. Generative Models for Culture-Aware Human-Robot Interaction -- 14. Generating Artistic Portrait Drawings from Images -- 15. Generative Models for Image Processing -- 16. Generative AI to understand complex ecological interactions -- 17. Generative AI for Architecture -- 18. Data augmentation of construction industry with Generative Adversarial Network.

This book provides a comprehensive introduction to Generative AI in terms of basic concepts, core technologies, technical architecture, and application scenarios. Readers gain a deeper understanding of the emerging discipline of Generative AI. This book covers the latest cutting-edge application technologies of Generative AI in various fields. It provides relevant practitioners with ideas to solve problems and deepen their understanding of Generative AI. At the same time, it guides and helps Generative AI and related industries to deepen their understanding of the industry and enhance professional knowledge and skills. Starting from reality, this book lists many cases and analyzes theories in a popular image. The book is useful for AI researchers and specifically for those working with the applications at hand (primarily medical imaging and construction/twinning industry). It covers a variety of cutting-edge technologies in Generative AI, which provides researchers with new research ideas.
