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Autore	Bhattacharya Pronaya
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Altri autori (Persone)	LiuHaipeng DuttaPushan Kumar RodriguesJoel J. P. C SethiGautam
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Nota di contenuto	The emerging healthcare landscape -- AI for Healthcare 5.0: A shift towards personalized healthcare -- Transition to Generative AI in Healthcare 5.0 -- Drug Synthesis through Generative AI Models -- Generative AI for Data Augmentation in Clinical Trials -- Generative AI models for Personalized Healthcare -- Generative Deep Models for Medical Imaging -- Generative AI-driven fitness and real-time healthcare monitoring and control -- The future of Surgery and Anatomical Operations via Generative AI -- Generative models for AR/VR assisted Healthcare 5.0 -- Accuracy and Reliability of Synthetic Data Generation.
Sommario/riassunto	This book serves as a critical resource that bridges the gap between

burgeoning technology and its practical implementation. The book starts with an in-depth exploration of healthcare 5.0 principles, laying the foundation for the reader to understand the current shifts in healthcare paradigms. Then, it dives into the intricacies of generative models in healthcare, detailing how these algorithms work and the applications they serve. The book further delves into the subsets of generative machine learning and deep learning techniques in healthcare. As we move towards more complex applications, the book takes a turn to address the critical subject of interpretability and explainability in generative models, a topic that resonates profoundly given the life-critical nature of medical decisions. Finally, the book concludes with a robust discussion on the security and privacy concerns that accompany the deployment of GAI in real healthcare settings. By offering a multidimensional viewpoint—coupled with case studies, statistical analyses, and expert insights—the book ensures that the reader is left with a nuanced understanding of how GAI can be both a boon and a challenge in healthcare. As such, the proposed book serves as an indispensable resource for healthcare professionals, data scientists, researchers, and anyone invested in the future of healthcare and AI.

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