1. Record Nr. UNINA9911002562903321

Titolo	Blockchain-Assisted Technologies for Sustainable Healthcare System / / edited by Saurabh Jain, Keshav Kaushik, Adarsh Kumar
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9639-28-X
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XII, 183 p. 49 illus., 40 illus. in color.)
Collana	Blockchain Technologies, , 2661-8346
Disciplina	005.824 005.74
Soggetti	Blockchains (Databases) Biomedical engineering Internet of things Health services administration Artificial intelligence Social medicine Blockchain Medical and Health Technologies Internet of Things Health Care Management Artificial Intelligence Health, Medicine and Society
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Adopting Blockchain in emerging Technologies : Its benefits and challenges -- Blockchain and Internet of Medical Things (IoMT) -- Blockchain based Secure Healthcare System -- Machine Learning towards Next Generation Sustaina-ble Healthcare Systems -- Blockchain and Machine Learning Integration with IoT for Healthcare Applications: A Novel Approach to Psoriasis Diagnosis -- Blockchain based Healthcare Recommender System using Deep Learning -- Blockchain and Healthcare in Supply Chain Management -- Blockchain and Health Information Exchange -- Security & Privacy in Next Generation Healthcare Services -- Advances in Health Information

Exchange.

Sommario/riassunto

This book highlights how blockchain and other emerging technologies can improve services, processes, and applications for a sustainable healthcare system. It covers theoretical and practical elements of blockchain technology and analyzes the possibilities, problems, applications, and research in the field of blockchain-based sustainable healthcare applications. It provides the necessary information for readers, blockchain practitioners, researchers, database professionals, etc. Furthermore, the book identifies current literature gaps on the application of blockchain technology in the sustainable healthcare industry. Sustainable healthcare is a data-intensive industry that generates, receives, and transmits massive amounts of data daily. Existing data-sharing protocols in sustainable healthcare systems routinely expose system vulnerabilities in ensuring the confidentiality and security of healthcare data. Most functions in sustainable healthcare systems involve the sharing or use of sensitive and personal data. A serious problem is developing technologies that preserve the usefulness of health data while protecting patient privacy and discretion in how their data is used. As a result, the research community studies safe, privacy-preserving, and sustainable health systems using emerging technologies such as blockchain. Blockchain has emerged as an essential technology in the current digital transformation of many industries, including supply chain, education, government, healthcare, and many more sustainable applications. Blockchain applications for healthcare data management can potentially develop new services for physicians, patients, and health institutions in patient records administration, payment management, claims, and data integrity. This allows patients and healthcare organizations to limit unauthorized access to sensitive information and to maintain irreversible audit trails of patient data access and change. Blockchain and other emerging technologies can potentially be used for sustainable health supply chain activities. By making the supply chain transparent and immutable, it can monitor and protect healthcare data at various levels while maintaining 100% integrity of healthcare data.