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Nota di contenuto	Chapter 1: Introduction to Cloud, Fog, and Edge Computing in Healthcare -- Chapter 2: Addressing the Challenges in Federating Edge Resources -- Chapter 3: Integrating IoT + Fog + Cloud Infrastructures: System Modelling and Research Challenges -- Chapter 4: Blockchain and Federated Learning for the Management and Orchestration of Network Slices in 5G, Fog, Edge, and Clouds -- Chapter 5: Health Optimization Problems in Fog and Edge Computing with Machine Learning -- Chapter 6: A Lightweight AI-Enabled Container Middleware for Edge Cloud Architectures -- Chapter 7: Health Data Management in Fog Computing using Machine Learning -- Chapter 8: Predictive Analysis in Healthcare to Support Fog Application Deployment -- Chapter 9: Using Machine Learning for Protecting the Security and Privacy of Internet of Medical Things (IoMT) Systems -- Chapter 10: Fog Computing Realization for Healthcare-Based Big Data Analytics with

Machine Learning -- Chapter 11: Exploiting Fog Computing and Federated Learning in Health Monitoring -- Chapter 12: Smart Surveillance Video Stream Processing at the Edge for Real-Time Patient Activity Tracking with Machine Learning -- Chapter 13: Fog Computing Model for Evolving Smart Healthcare Applications -- Chapter 14: Testing Perspectives of Fog-Based IoMT Applications with Federated Learning -- Chapter 15: Legal Aspects of Operating IoMT Applications in the Fog Computing.

Sommario/riassunto	This book discusses how Cloud, Fog, and Edge computing, alongside federated learning and blockchain, are revolutionizing healthcare systems by addressing the challenges of data management, privacy, and efficiency. Targeted at healthcare technology researchers, professionals, and advanced students, it explores how these technologies enhance patient care, data security, and organizational effectiveness. The book provides a detailed overview of how Cloud, Fog, and Edge computing work in healthcare, focusing on real-time data processing and secure data sharing. It covers integrating federated learning for privacy-preserving AI models, blockchain for ensuring data integrity, and the technical and regulatory challenges of implementing these systems in healthcare settings. Real-world case studies illustrate successful applications, while practical advice helps navigate common obstacles. A must-read for anyone involved in healthcare delivery, research, or policy, this book offers invaluable insights into the future of healthcare technology. It equips healthcare professionals and technologists with the knowledge to leverage these emerging tools to improve patient outcomes, safeguard electronic health records, and streamline healthcare delivery systems.