Future of AI in Biomedicine and Biotechnology

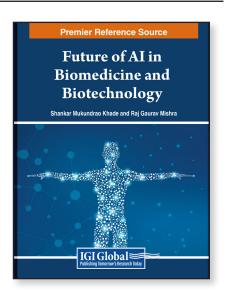
Part of the Advances in Medical Diagnosis, Treatment, and Care Book Series

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Description:

The healthcare industry is grappling with numerous challenges, including rising costs, inefficiencies in service delivery, and the need for personalized treatment approaches. Traditional healthcare management and delivery methods must be improved in addressing these issues, leading to a growing demand for innovative solutions. Additionally, the exponential growth of medical data and the complexity of biomedical research and biotechnology presents a daunting challenge in harnessing this data effectively for improved patient care and medical advancements. There is a pressing need for a comprehensive understanding of

how artificial intelligence (AI) can be leveraged to tackle these challenges and drive meaningful change in the healthcare sector.



Future of Al in Biomedicine and Biotechnology offers a timely and insightful solution to the challenges faced by the healthcare industry. By exploring the intersection of Al with biomedical sciences and biotechnology, this book provides a comprehensive guide to harnessing the power of Al for transformative healthcare innovation. Through a series of expertly curated chapters, the book delves into critical topics such as machine learning, medical imaging, natural language processing, drug discovery, personalized medicine, and telemedicine, among others, offering readers a deep understanding of Al's potential impact on healthcare.

This book is not just a theoretical exploration; it is a practical roadmap for healthcare professionals, researchers, policymakers, and entrepreneurs seeking to navigate the complexities of AI in healthcare. By providing real-world examples, case studies, and future trends, the book equips readers with the knowledge and tools needed to harness the full potential of AI in biomedicine and biotechnology. Whether you want to optimize healthcare delivery, develop innovative healthcare technologies, or shape healthcare policy, **Future of AI in Biomedicine and Biotechnology** is invaluable to inspire and inform your journey towards a more efficient, effective, and personalized healthcare system.

Hardcover: \$455.00 E-Book: \$455.00 Hardcover + E-Book: \$550.00

Topics Covered:

- Al for Healthcare Resource Optimization
- Al in Bioinformatics and Computational Biology
- Al in Biotechnology Manufacturing and Quality Control
- Al in Drug Repurposing and Pharmacovigilance
- Al in Genomic Medicine
- AI-Driven Drug Discovery and Development
- Al-Powered Medical Diagnosis and Decision Support
- Artificial Intelligence
- Deep Learning in Medical Imaging

- Ethical and Regulatory Considerations in Al
- Foundations of Machine Learning for Biomedical Data
- Future Trends and Challenges in AI for Biomedical and Biotechnology
- Historical Perspectives on AI in Healthcare
- Introduction to AI in Biomedical and Biotechnology
- Natural Language Processing for Clinical Text Data
- Patient Engagement and AI-Driven Healthcare Apps

Subject: Computer Science &

Information Technology

Readership Level: Advanced-Academic Level

(Research Recommended)

Classification: Edited Reference

Research Suitable for: Advanced Undergraduate

Students; Graduate Students; Researchers; Academicians; Professionals; Practitioners

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