

Artificial Intelligence in Biomedical Engineering and Its Applications — D. Tripathi, S. Metha, et al. Biosensors (MDPI) 2025.

Provides an overview of how AI is transforming biomedical engineering, including diagnostics, biosensors, imaging, and continuous monitoring.

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[https://www.mdpi.com/2306-5354/12/2/163?utm\\_source=chatgpt.com](https://www.mdpi.com/2306-5354/12/2/163?utm_source=chatgpt.com)

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A Systematic Literature Review of Artificial Intelligence in the Healthcare Sector: Benefits, Challenges, Methodologies, and Functionalities — O. Ali, W. Abdelbaki, et al. Journal of Innovation & Knowledge (2023).

Surveying ~180 academic works, this review covers the broad use of AI in healthcare, its methodologies, the benefits, and the challenges of its implementation.

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[https://www.elsevier.es/en-revista-journal-innovation-knowledge-376-pdf-download-S2444569X2300029X?utm\\_source=chatgpt.com](https://www.elsevier.es/en-revista-journal-innovation-knowledge-376-pdf-download-S2444569X2300029X?utm_source=chatgpt.com)

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Advancing Biomedical Engineering With Artificial Intelligence — (Wiley) 2025.

Focus on how AI and ML contribute to key areas in biomedical engineering: device innovation, data analysis, predictive medicine, etc.

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[https://onlinelibrary.wiley.com/doi/10.1155/ijcp/9888902?utm\\_source=chatgpt.com](https://onlinelibrary.wiley.com/doi/10.1155/ijcp/9888902?utm_source=chatgpt.com)

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A Systematic Review of the Integration of Information Science, Artificial Intelligence, and Medical Engineering in Healthcare: Current Trends and Future Directions — S. G. Hashemi Fotemi, N. Reddy Mannuru, et al. InfoScience Trends (2024).

Interdisciplinary review covering how information science + AI + medical engineering come together; discusses data integration, devices, and future challenges.

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[https://www.researchgate.net/publication/382908629\\_A\\_Systematic\\_Review\\_of\\_the\\_Integration\\_of\\_Information\\_Science\\_Artificial\\_Intelligence\\_and\\_Medical\\_Engineering\\_in\\_Healthcare\\_Current\\_Trends\\_and\\_Future\\_Directions?utm\\_source=chatgpt.com](https://www.researchgate.net/publication/382908629_A_Systematic_Review_of_the_Integration_of_Information_Science_Artificial_Intelligence_and_Medical_Engineering_in_Healthcare_Current_Trends_and_Future_Directions?utm_source=chatgpt.com)

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The Evolving Regulatory Paradigm of AI in MedTech: A Review of Perspectives and Where We Are Today — K. Zhou & G. Gattinger. Therapeutic Innovation & Regulatory Science (2024).

Examines key stakeholders, regulatory challenges, and the global regulatory landscape for AI-enabled medical devices.

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[https://link.springer.com/article/10.1007/s43441-024-00628-3?utm\\_source=chatgpt.com](https://link.springer.com/article/10.1007/s43441-024-00628-3?utm_source=chatgpt.com)

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Artificial Intelligence-Based Software as a Medical Device (AI-SaMD): A Systematic Literature Review — S. A. Ebad, et al. Healthcare (MDPI) (2025).

Focuses specifically on software (not hardware) medical devices powered by AI: validation, regulation, data governance, and clinical integration.

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[https://www.mdpi.com/2227-9032/13/7/817?utm\\_source=chatgpt.com](https://www.mdpi.com/2227-9032/13/7/817?utm_source=chatgpt.com)

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