

Special Issue

Bioengineering Intelligent Systems: From Robotic Manipulation to AI-Driven Healthcare Solutions

Message from the Guest Editor

This Special Issue explores cutting-edge advancements in **intelligent bioengineering systems**, bridging robotics, artificial intelligence (AI), and healthcare technologies. It covers innovative research in **robotic manipulation** and **AI-driven healthcare solutions**. Contributions may include novel algorithms, sensor technologies, human-machine interfaces, and real-world applications that enhance precision, efficiency, and accessibility in medicine and industry. We welcome the submission of original research, reviews, and case studies addressing challenges and opportunities in the following areas:

- **Smart Robotics:** Dexterous manipulation, bio-inspired designs, and autonomous control.
- **AI in Healthcare:**
 - Time-series data analysis (e.g., EEG, IMU, and heart rate) for healthcare or disease diagnosis.
 - AI-driven medical signal and image diagnostics.
 - Federated learning and edge computing for medical applications.
- **Human-Centric Systems:** Wearable devices, rehabilitation robotics, and AI-augmented decision-making.

This issue aims to foster interdisciplinary collaboration, highlighting how intelligent systems can revolutionize biomedical engineering and clinical practice.

Guest Editor

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Deadline for manuscript submissions

31 October 2025



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/240053

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Message from the Editor-in-Chief

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Editor-in-Chief

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