

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

Prof. Dr. Tae-Seong Kim

Department of Biomedical Engineering, College of Electronics and Information, Kyung Hee University, Yongin 17104, Korea

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Bioengineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
bioengineering@mdpi.com

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About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

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