



11th International Conference on Control,
Decision and Information Technologies

July 15- 18, 2025

Split, Croatia

CALL FOR PAPERS - SPECIAL SESSION

“Biomedical Device Design”

for CODIT 2025

July 15-18, 2025 ▪ Split, Croatia

Session Co-Chairs:

Dr. Buket Barkana, The University of Akron, USA - (email: bbarkana@uakron.edu)

Dr. Chen Ling, The University of Akron, USA - (email: cl99@uakron.edu)

Dr. Sang-Eun Song, The University of Akron, USA - (email: ssong@uakron.edu)

Session description:

This special session deals with the problem of integrating control, decision, and information technologies into biomedical device design to ensure optimal functionality, patient safety, and clinical reliability. Control technologies focus on maintaining the precise operation of devices and decision technologies utilize artificial intelligence and machine learning to analyze real-time data and make autonomous, evidence-based choices, as seen in diagnostic tools and smart prosthetics. Information technologies enable seamless data acquisition, processing, and communication, connecting devices to healthcare networks for remote monitoring and data-driven care. Together, these technologies address the challenges of adaptability, accuracy, and interoperability in complex biomedical systems, paving the way for innovative and patient-centric medical solutions.

The goal is to bring researchers and industry together to discuss recent technologies and future trends in biomedical device design.

The topics of interest include, but are not limited to:

- Rehabilitation Devices
- Smart Diagnostic Tools
- Autonomous Surgical Robots
- Wearable Devices
- Telemedicine Devices
- Connected Medical Devices (IoT)
- Data Acquisition, Signal and Image Processing, Data Storage
- Human-Machine Interfaces (HMI)
- Diagnostic Tools and Predictive Models

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 07, 2025:**

<http://controls.papercept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDIT 2025 link** “Submit a Contribution to CoDIT 2025” and follow the steps.

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

February 07, 2025: deadline for paper submission

April 27, 2025: notification of acceptance/reject

May 17, 2025: deadline for final paper and registration