

International Conference on Data-Processing and Networking (ICDPN-2025)

Date: $7th - 8^{th}$ November, 2025

ORGANISED BY: Institute of Technology and Business in České Budějovice, Near Prague, Czech Republic, Europe (Venue).

****** CALL FOR PAPERS **********

SPECIAL SESSION ON

Innovation in Biomedical Engineering and Role of AL and ML In health care

SESSION ORGANIZERS:

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EDITORIAL BOARD: (Optional)

[Name, University or Organization, Country, e-mail]

SESSION DESCRIPTION:

This special session will explore the transformative impact of MECHANICAL innovative computation in the field of biomedical engineering, focusing on advancements in biomaterials , Role of AI in biodesign, Biomedical instrumentation, Neuroscience, biomedical implants, biomechanics, surgery, and role of mechanical in wearable health technologies. We will discuss Bioinspired Algorithms, Integration of AI in Rehabilitation Engineering, and the ethical and regulatory challenges surrounding AI-driven biomedical technologies. The session aims to highlight cutting-edge research and foster collaboration among experts in the field of mechanical and rapidly evolving fields in biomedical engineering

RECOMMENDED TOPICS:

Topics to be discussed in this special session include (but are not limited to) the following:

- Innovation in implants
- Innovative computation using Bio-inspired Algorithms
- Innovation in BioDesign
- Innovative computation in Biomedical Imaging
- Innovative computation in Biomechanics

- Innovative computation in Surgery
- Role of mechanical in Wearable Health Technologies
- Innovative computation in Rehabilitation Engineering
- Ethical and Regulatory Issues in Al-Driven Biomedical Technologies
- Role of Al-ML in biomechanics.
- Innovations in Biomaterials
- 3-D printers in biomedical design.

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SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on [session name] All submissions must be original and may not be under review by another publication. INTERESTED AUTHORS SHOULD CONSULT THE CONFERENCE'S GUIDELINES FOR MANUSCRIPT SUBMISSIONS at https://www.icdpn-conf.com/Downloads. All submitted papers will be reviewed on a double-blind, peer review basis.

NOTE: While submitting paper in this special session, please specify [**Session Name**] at the top (above paper title) of the first page of your paper.

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