

# 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**

Smart Technologies for Human Well-Being: The Role of IoT and AI

#### **SESSION ORGANIZERS:**

- 1. Dr. Divya Agarwal, Assistant Professor, Vivekananda Institute of Professional Studies-Technical campus, Delhi, India, +91-9968362010 (er.divya7@gmail.com)
- 2. Dr. Sandhya Tarwani, Assistant Professor, Vivekananda Institute of Professional Studies-Technical campus, Delhi, India, +91-9650295744 (<a href="mailto:sandhya.tarwani@vips.edu">sandhya.tarwani@vips.edu</a>)

**EDITORIAL BOARD: (Optional)** 

NA

#### **SESSION DESCRIPTION:**

This session will explore the transformative role of Human-Centric IoT and AI in enhancing quality of life by prioritizing well-being, accessibility, and inclusivity. It will showcase cutting-edge innovations that leverage IoT and AI to improve healthcare, assistive technologies, and smart living environments. Key topics include AI-powered personalized healthcare solutions, wearable health monitoring devices, smart home automation for independent living, and mental health support systems driven by intelligent algorithms. The session will also highlight IoT-based solutions designed to enhance accessibility for differently-abled individuals and improve overall safety and efficiency in everyday life. Additionally, ethical considerations, user-centric design principles, and equitable access to technology will be discussed to ensure that advancements in AI and IoT benefit diverse communities. By addressing real-world challenges, this session aims to foster interdisciplinary collaborations and inspire innovative research toward creating a smarter, more inclusive, and human-focused technological future.

## **RECOMMENDED TOPICS:**

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

- Al-driven personalized healthcare solutions
- Wearable health monitoring devices and predictive analytics
- IoT-enabled remote patient monitoring and telemedicine
- Al-powered mental health support systems
- IoT-based smart home automation for elderly and disabled individuals

- Al-driven ambient intelligence for adaptive and safe living spaces
- Smart cities and infrastructure for sustainable and inclusive urban living
- Al-powered IoT solutions for disaster response and public safety
- Al and IoT for differently-abled individuals (e.g., smart prosthetics, assistive robots)
- Voice-controlled and gesture-based interfaces for accessibility
- IoT-enabled navigation systems for visually impaired individuals
- Al-driven speech and language processing for communication assistance
- Ensuring privacy and security in Al-powered IoT systems
- Ethical AI and IoT frameworks for fairness and inclusivity
- User-centric design principles for equitable access
- Addressing biases in AI and IoT applications
- Al-driven robotics for healthcare and personal assistance
- Digital twins and Al-powered simulations for human well-being
- The role of 5G and edge computing in human-centric IoT
- Interdisciplinary collaborations for innovative and inclusive solutions

## **SUBMISSION PROCEDURE:**

Researchers and practitioners are invited to submit papers for this special theme session on **Smart Technologies for Human Well-Being: The Role of IoT and AI on or before [30th MAY 2025].** 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 **Smart Technologies for Human Well-Being: The Role of IoT and AI** at the top (above paper title) of the first page of your paper.

