

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).



SPECIAL SESSION ON

Al-Enhanced Data Processing and Intelligent Networking for Next-Generation Digital Infrastructure

SESSION ORGANIZERS:

- > Sathish Krishna Anumula, IBM Corporation, Detroit, USA, sathishkrishna@gmail.com
- Dr. Vikash Yadav, Government Polytechnic Bighapur Unnao, Board of Technical Education, Uttar Pradesh, India, vikas.yadav.cs@gmail.com

EDITORIAL BOARD: (Optional)

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

SESSION DESCRIPTION:

This session focuses on the transformative role of Artificial Intelligence in modern data processing pipelines and intelligent network systems. As data volumes grow exponentially in the digital era, efficient processing, real-time analytics, and secure, scalable networking are crucial for building future-ready infrastructures. This session invites research contributions that leverage AI, machine learning, and deep learning to improve data handling, distributed computing, and smart networking systems across domains.

RECOMMENDED TOPICS:

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

- AI models for large-scale data preprocessing, transformation, and analytics
- Deep learning for intelligent network traffic classification and optimization
- Al-driven network resource allocation and load balancing
- Scalable architectures for real-time data stream processing
- Federated and edge AI for distributed data processing
- > Adaptive routing protocols using reinforcement learning
- Secure data sharing and privacy-preserving AI in networks

- Cognitive networking for self-healing and self-optimizing systems
- > Al for IoT data integration in smart environments
- Big data frameworks integrating AI for efficient network analytics

SUBMISSION PROCEDURE:

Researchers and practitioners are invited to submit papers for this special theme session on [Al-Enhanced Data Processing and Intelligent Networking for Next-Generation Digital Infrastructure] on or before [30th August 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 [Al-Enhanced Data Processing and Intelligent Networking for Next-Generation Digital Infrastructure] at the top (above paper title) of the first page of your paper.

