CALL FOR PAPERS - SPECIAL SESSION

"Logistics operations for smart factories according to Industry 5.0 guidelines"

for CODIT 2025

July 15-18, 2025 ▪ Split, Croatia

Session Co-Chairs:

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Session description:

In today's highly competitive industrial market, optimizing production efficiency has become crucial for decision-making policies. The introduction of automation and artificial intelligence into production lines addresses challenging logistics issues such as streamlining operations, enhancing customer service, reducing transportation costs, and improving planning and risk management. Technological innovations in automation as well as machine learning offer inherent capabilities to sense and interact with the surrounding environment, enabling cost rationalization and increasing societal benefits like safety and accessibility. In fact, these tools can efficiently assist in managing production lines, handling warehouse inventories, and supporting intra- and inter-logistics services across various economic sectors. Beside this, the transition from Industry 4.0 to Industry 5.0 marks a significant evolution, emphasizing human-robot collaboration and the integration of advanced autonomous systems into manufacturing and service sectors. This shift is characterized by devices capable of intelligent interactions within dynamic and uncertain environments while performing complex tasks such as material handling, assembly operations, and logistics assistance.

The goal is of this special session is to collect ideas and offer efficient solutions, concerned with learning-based schemes and distributed control frameworks, for logistics operations in the area of smart factories.

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

- Autonomous robots
- Deep reinforcement learning
- Scheduling
- Internet of vehicles
- Predictive maintenance

- Networked and Distributed control systems
- Routing decision schemes

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