



10th International Conference on Control,
Decision and Information Technologies

July 01- 04, 2024

Valletta, Malta

CALL FOR PAPERS - SPECIAL SESSION

Data driven approach for modelling, control and optimisation of cyber-physical systems

for **CODIT 2024, July 01-04, 2024** ▪ Valletta, Malta

Session Chairs:

Alessandro Giua, University of Cagliari, Italy - (email: giua@unica.it)

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Session description:

The primary goal of modelling, control and optimisation in data-driven cyber-physical systems is to create models that can learn from data and make optimal decisions. These models aim to improve the performance, efficiency, and adaptability of systems in various fields, such as robotics, manufacturing, smart cities, autonomous systems, and healthcare. Several methods have been employed in this field: Machine Learning (ML) algorithms are used to create models that learn from data and can predict outcomes and make decisions based on the patterns they have learned. Control theory provides mathematical foundations to design systems that maintain desired behaviours in a changing environment. It can be used in conjunction with ML to create models that can adapt to changes. Optimisation techniques are used to find the best solution from a set of possible solutions. They are often used in ML to tune model parameters and improve performance. This special session is targeted to researchers working in this multidisciplinary field.

Areas of interest include, but are not limited to:

- Discrete Event Systems
- Hybrid systems
- Model checking
- Robotics & Smart Manufacturing
- Smart cities
- Autonomous systems
- Healthcare

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 03, 2024:**

<http://controls.papercept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CoDiT 2024 link** "Submit a Contribution to CoDiT 2024" 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 03, 2024: deadline for paper submission

April 14, 2024: notification of acceptance/reject

May 10, 2024: deadline for final paper and registration