



10th International Conference on Control,
Decision and Information Technologies

July 01 - 04, 2024

Valletta, Malta

CALL FOR PAPERS - SPECIAL SESSION

“Recent Advances in Multi-Robot Systems: Modeling, Optimization and Applications”

for **CODIT 2024**

July 01-04, 2023 ▪ Valletta, Malta

Session Co-Chairs:

Dr. Rabah Ammour, Aix-Marseille University, France - (rabah.ammour@lis-lab.fr)

Dr. Said Amari, University of Sorbonne Paris-Nord, France - (samari@ens-paris-saclay.fr)

Prof. Dimitri Lefebvre, University Le Havre Normandie, France- (dimitri.lefebvre@univ-lehavre.fr)

Session description: This special session deals with the problem of Multi-Robot Systems (MRS). In the last years, MRS have experienced considerable recognition due to various real-world applications. In particular, Multi-Robot Task Allocation (MRTA) is among the most interesting MRS problems. This problem concerns the situation when a set of given tasks must be performed by a team of mobile robots that collaborate with the intention of optimizing an objective function.

The goal of this special session is to gather novel approaches devoted to MRS problems and applications. In particular, new contributions for the development of modeling and analysis methods, of verification algorithms and of specific control structures design are encouraged including theoretical and application papers

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

- Modeling aspect, MILP formulations
- Optimization, decision and control
- Dynamic routing and scheduling
- Formal methods
- Coordination and collaboration methods
- Artificial intelligence approaches
- Timed and energy constrained MRS problems
- Uncertain and dynamic environments exploration
- Collision and obstacle avoidance
- Applications for manufacturing systems, transportation systems, and so one.
- ...

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **February 03, 2024**: <http://controls.paperecept.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