



**CALL FOR PAPERS
SPECIAL SESSION ON
"Optimal Control in Robotics"
for CODIT'20**

June 29 - July 2, 2020 ▪ Prague, Czech Republic

Session Co-Chairs:

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Prof. Ivan Zelinka, Faculty of Electrical Engineering and Computer Science, Technical University of Ostrava, Czech Republic

Prof. Fernando Lobo Pereira, Faculty of Engineering, Porto University, Portugal

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Session description

This special session deals with the methods for solving optimal control problems in robotics. Nowadays a widespread use of robots makes it necessary to constantly solve control problems to achieve goals with the optimal values of quality criteria, taking into account various phase constraints, uncertainties, etc. The aim of our session is to bring to get her specialists involved in the creation of control systems in robotics. We invite researchers who are developing theoretical approaches to solving optimal control problems in robotics, computational algorithms and practical implementations of control systems.

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

- optimal control
- Pontryagin maximum principle
- dynamic programming
- control system synthesis
- optimal control for groups of robots
- optimal control with phase constraints
- optimal control with uncertainties
- computational optimization
- swarm robotics
- evolutionary algorithms
- intelligent control systems
- multicriterial optimization

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by **January 24, 2020**:

<http://controls.papcept.net/conferences/scripts/start.pl>. In PaperCept, click on the **CODIT 2020 link** "Submit a Contribution to CoDIT 2020" 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

January 24, 2020: deadline for paper submission

April 10, 2020: notification of acceptance/reject

May 7, 2020: deadline for final paper and registration