



Systems and Control Group Seminar

16 May, 2024, 11:15

Mathematics Department, University of Aveiro

Room Sousa Pinto (11.2.6)

Learning Cost Functions for Reinforced Learned Controllers in a Quadrupedal Robot

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Abstract

In this talk, we consider a reinforced learning controller developed for a quadrupedal robot and we implement a data-driven method to investigate the cost function for which it is an optimal controller. Our approach is deeply rooted in Lagrangian mechanics since we use the fact that an optimal control problem, under some conditions, is equivalent to a second-order variational problem. This method aims to shed light on the interpretability of the controller.

This seminar was supported by CIDMA - Center for Research and Development in Mathematics and Applications and is funded by the Fundação para a Ciência e a Tecnologia, I.P. (FCT, Funder ID = 50110000187) under Grants <https://doi.org/10.54499/UIDB/04106/2020> and <https://doi.org/10.54499/UIDP/04106/2020>.