ESREL2020PSAM15

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CALL FOR ABSTRACTS

Special session on
Reinforcement Learning for Industry 4.0

Description

Industry 4.0, the fourth industrial revolution, aims at creating smart factories, equipped with disruptive technologies such as advanced robotics, high computing power and connectivity, etc., which are integrated with analytical and cognitive technologies that enable machine-to-machine (M2M) and machine-to-human (M2H) communication. The smart factory can offer new services and products to customers, with efficiency, standards of quality and reliability higher than before. These allow expanding the value chain by generating new business models that create value for customers and revenue for manufacturing companies.

Motivation

To fully exploit the Industry 4.0 capabilities, advanced analytics must be used at the asset level to prescribe optimal solutions for its holistic management. To succeed in this objective, 'cognitive' systems must be developed, which rely on advanced technology at the intersection of big data, machine learning, and artificial intelligence analytics. Reinforcement Learning (RL) is one of the most promising technologies to build these cognitive models for the optimal management of complex systems.

Objective

This special session will host contributions showing the potential of RL for Industry 4.0 as well as theoretical and technological enhancements.

Please submit your abstract by November 10, 2019

Please submit your abstract through the conference website, www.esrel2020-psam15.org/authors.html. In step 1 of the submission procedure, select "**Reinforcement Learning for Industry 4.0**" as conference track. Also, please send a copy of the abstract by email to the special session organizers.

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