special session "Reinforcement learning and inverse reinforcement learning for average reward case"
2017 IEEE Symposium on Adaptive Dynamic Programming and Reinforcement Learning (ADPRL 2017).

In the reinforcement learning (RL), average reward optimality framework is more appropriate for cyclical tasks, specially for the cooperative learning, than the much better studied discounted framework. The average-reward-based learning also shows the superiority in multi-agent task-level systems. Over the past decade, much advancement was achieved in value-function-based RL, policy gradient, hierarchical average reward RL, and inverse reinforcement learning (IRL).

This special session aims to bring together researchers in this field to present and discuss promising new work, to identify recent trends in algorithmic development and applications, and to establish important directions and goals for further research and collaboration. Further, we hope that these active discussions and collaborations will help us to overcome the difficulties and its extensions in the multi-agent task-level setting to real-world problems, as well as point researchers to the real-life challenges.

Topics of particular interest include (but not limited to):
Value-function-based reinforcement learning

Policy gradient reinforcement learning

Comparisons of algorithms

Hierarchical average reward reinforcement learning

Inverse reinforcement learning for average reward case

Hierarchical inverse reinforcement learning

Deep reinforcement learning

Computational complexity

Convergence analysis

Applications

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Important Dates:

http://www.ele.uri.edu/ieee-ssci2017/ImportantDates.htm

Paper Submissions: July 2, 2017

Notification to Authors: August 27, 2017

Final Submission: September 24, 2017

Early Registration: September 24, 2017

Paper Submission:

http://www.ele.uri.edu/ieee-ssci2017/PaperSubmission.htm

ADPRL 2017 will be scheduled in November 27 to December 1, 2017, as part of the 2017 IEEE Symposium Series on Computational Intelligence, held in Hawaii, USA. We would like to invite you to submit research papers to this special session. The paper submission deadline is July 2, 2017. Please follow the general SSCI and ADPRL paper submission instructions and select our special session as your topic when submitting. For more information, please see ADPRL 2017 site: http://www.ele.uri.edu/ieee-ssci2017/ADPRL.htm