

relational transfer in reinforcement pdf

RELATIONAL TRANSFER IN REINFORCEMENT LEARNING by Lisa Torrey A dissertation submitted in partial fulfillment of the requirements for the degree of

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in a reinforcement learning context, one of the benefits of transfer learning can be that the agent is able to learn a new task faster, i.e., with less training experience.

Learning Relational Options for Inductive Transfer in

3.1 Transfer learning methods discussed in Section 3.2, classifying each in terms of four dimensions: allowed task differences, source tasks, transferred knowledge and learning methods.

Relational Transfer across Reinforcement Learning Tasks

Keywords: Relational Reinforcement Learning, Transfer Learning, Options 1 Introduction In reinforcement learning [12], an agent can observe its world and perform actions in it.

Learning Relational Options for Inductive Transfer in

Relational reinforcement learning (RRL) itself can be considered a related topic (Tadepalli, Givan, and Driessens 2004). In RRL, state descriptions and learned models use first-order logic, which provides opportunities for transferring relational concepts. Croonenborghs, Driessens, and Bruynooghe (2007) learn relational options for use in relational RL.

Transfer in Reinforcement Learning via Markov Logic Networks

In addition to relational probabilistic action models, it can also learn exogenous effects. Relational model learners can be integrated in Reinforcement Learning (RL) approaches such as REX (Lang et al., 2012), allowing an agent to learn a task autonomously.

